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News Summary

Articles on inside pages

Freshman enrollment at private colleges is 3.8 per cent below last year's figure. Story on Page 8.

Distribution of student-aid forms for 1983-84 may be two or more months late because of a legal dispute involving the Department of Education. Story on Page 15.

A federal audit of Harvard University's medical school concluded that $1.7-million had been improperly charged to federal research grants. Story on Page 15.

College admissions have probably never been totally "blind" to students' financial need, said participants in the annual meeting of the College Board. Story on Page 9.

Frank S. M. Hodsoll, chairman of the National Endowment for the Arts, has called on colleges to help strengthen the place of the arts in America. Story on Page 10.

Many Chicanos in higher education are optimistic about their growing representation among faculty members and administrators. Story on Page 12.

The proposed demotion of up to 40 basketball teams from the National Collegiate Athletic Association's top division could destroy three athletic conferences. Story on Page 17.

Members of a tiny union of adjunct faculty members at American University have been learning the ropes of collective bargaining. Story on Page 27.

University officials in Canada are concerned about the national and provincial governments' failure to agree on a plan for financing higher education. Story on Page 21.

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Psychoanalysis Can Illuminate a Life, 2 Biographers Say

By **PAUL DESRUISSEAUX**

CHICAGO

It was, Jean Strouse explained, "just a lark."

She was at the Houghton Library at Harvard University, doing research on the James family papers, when she realized the significance of the date. August 7. It was the birthday of Alice James, whose biography she was then in the process of writing. She decided to mark the occasion by visiting the Cambridge cemetery where Miss James and other members of her family—including her brothers Henry, the novelist, and William, the psychologist and philosopher—were buried.

"I didn't feel that I'd gotten sentimentally involved with my subject," Ms. Strouse said. "I just thought it would be a nice thing to do." So she bought some flowers, and she went.

At graveside, however, she suddenly was "quite overwhelmed."

"I found myself thinking, 'Probably nobody has been here to visit Alice in 50 years or more, maybe since the turn of the century.' And, much to my own amazement, I found myself saying, 'Don't worry, Alice, I'll take care of you.' "

"I was amused, and bemused, by that surprise," recalled Ms. Strouse. "And then I realized that Alice had worked her trick on me, too."

The stories biographers tell—usually revealing, sometimes wonderful—are not always about others.

"Psychoanalytic insights can form what reporters call 'deep background,' " says Jean Strouse.

To those who heard Ms. Strouse's story, it was more than a delicious anecdote. They were, after all, attending a conference, presented by the Institute for Psychoanalysis here, titled "Psychoanalysis and Biography," and they were expecting to hear about the relationship between the two. In the process, however, the 200 psychoanalysts, literary scholars, biographers, and readers also heard a good deal about the relationships that develop between biographers and their subjects.

According to Leon Edel, a biographer's ability to understand his own

Continued on Page 24, Column 2

Pentagon Blocked 6 Scientists, Optics Researchers Charge

Papers ordered withdrawn due to 'security problems'

TUCSON, ARIZ.

Researchers who attended a scientific conference here last month say the Pentagon ordered six scientists to withdraw their papers because of "security problems."

The papers were among 600 scheduled to be presented at the annual meeting of the Optical Society of America, and were believed to have had defense implications.

Pentagon spokesmen said last week that they were unable to confirm the reports.

George I. Stegeman, professor of optical sciences at the University of Arizona and a co-chairman of the conference, said that withdrawing the papers had created only "minor" problems at the meeting because so few were involved.

The society was notified by some of the authors a week before the meeting that Pentagon officals had told them their papers could not be presented because of problems in obtaining clearance for them, said Jarus Quinn, executive director of the society.

Research on Blue-Green Lasers

Mr. Quinn said three of the papers that were withdrawn presented results of research supported by the Defense Department on blue-green lasers. He said those lasers could transmit information easily through water, and that scientists believed they could be useful in communications between submarines and satellites.

In August, more than 100 papers were ordered withdrawn at a photo-optical conference in San Diego because they had not been cleared by the Defense Department. Some Pentagon officials said then that they would review department policies to prevent such disruptions in the future.

—KIM McDONALD

Demand Grows for Reforming High Schools

Poor-quality instruction, curricula assailed

By **BEVERLY T. WATKINS**

NEW YORK

More and more people in higher education are calling for sweeping reforms of America's high schools—including their basic goals, their curricula, and the quality of teaching. Many authorities in secondary education agree that such reforms are essential.

New studies are identifying a growing number of problems in the secondary schools—worsening academic performance by students, poor-quality instruction by teachers, curricula that are short on academics and long on electives, and burdensome federal requirements.

Evidence that the high schools are in great difficulty has been reflected in the downward trend in the Scholastic Aptitude Test scores of college-bound students, halted this fall for the first time in 19 years, and in the large number of remedial English and mathematics courses that colleges must offer.

A 'Universal' Diploma

Education leaders see "great stresses on the high schools today," says Michael O'Keefe, vice-president for program and policy studies at the Carnegie Foundation for the Advancement of Teaching.

Since the early 1960's, he says, "the American high school has been pushed into a large number of new roles and diffuse goals. It is now required to provide a universal high-school diploma. It must offer bilingual education and meet federal requirements to educate the handicapped. These new roles and goals are reflected in the curriculum."

Mr. O'Keefe says a study of American

Continued on Page 8, Column 1

BOSTON UNIVERSITY

The Century on File

It took the curator of Boston University's Twentieth Century Archives, Howard B. Gotlieb (above), 10 years to persuade the actress Bette Davis to donate her papers. See Page 6.

MARGINALIA

"When I read the opening item in your column for October 20," writes Norman P. Ross, "concerning overdue notices at the J. Sargeant Reynolds Community College, it occurred to me that there must be only two basic jokes about overdue notices: the one you related, and the one that happened to me.

"When I was demobilized at the end of World War II and took up residence in New York City, where I had a job waiting for me, I promptly applied for borrowing privileges at the New York Public Library and brought home my first book from the great institution.

"In due course, I received an overdue notice from the Library, which read as follows:

" 'The following book is overdue: THE ART OF RAPID READING.'

"Tardiness and forgetfulness—aren't those human failings the only two sources of humor in overdue notices?"

■

The president of a U.S. university has received the following letter from the Maison Internationale des Intellectuels in West Germany:

"M.I.D.I. was foundet in 1907 in Paris by the poet, professor and director Irénée Mauget. He also was elected as the first Président-Général of the 'M.I.D.I.-Paris 1907' and he remained it until he died in 1975, when he was 91 years of age.

"The 'M.I.D.I.-Paris 1907' is being active all over the globe: Europe, North America, South America, Asia and Africa. Members of the 'M.I.D.I.-Paris 1907' were and still be intelligent Ladies and Gentlemen of above mentioned continents having extra-ordinarily qualified in their jobs and tasks they had and they have to fullfill.

"From the USA we want to point aut some personalities only having been members of the M.I.D.I.: President Theodore Roosevelt; the mother of the President, Mrs. Roosevelt; President Harry Shippe Truman; President John Fitzgerald Kennedy; Albert Einstein; Wernher von Braun; the owner of the Nobel Price Ernest Hemingway; ; the artist Bing Crosby; the author Pearl S. Buck; the composer Igor Fjodorowitsch Strawinsky, etc etc. . . .

" 'M.I.D.I.-Paris 1907 has the possibility to award wellknown personalities with the title 'SENATOR h.c.' and wants in future to grant the 'DOCTOR h.c.' from a well-known US-university, too. . . .

"Should qour university be interested in a thigh cooperation with those worldwide activities of the 'M.I.D.I.-Paris 1907' in one or the other direktion, we would be most pleased to get your prompt suggestions. . . ."

We don't know about a thigh cooperation, but they do sound pretty hip.

—C.G.

In Brief

U.S. Will Seek Court Order to Regain D-Q U. Property

The U.S. Department of Justice will seek a court order to take possession of 643 acres of government property used by American Indians as the site of D-Q University, a spokesman for the department said last week.

Indians led by Dennis Banks, the university's chancellor and one of the founders of the American Indian Movement, refused to vacate the land and held a three-day prayer vigil at the university near Davis, Cal., as the government's deadline for their departure passed last month.

The government claims that the college failed to meet the terms of the transfer of the property to the Indians in 1970.

Pennsylvania College Sues Striking Faculty Union

Montgomery County Community College in Pennsylvania sued its striking faculty union last week, asking a county court to limit the number of faculty members on the picket line and to curtail their activities.

The union, an affiliate of the American Federation of Teachers (A.F.L.-C.I.O.), had increased the number of its pickets, preventing some students from entering the campus, after the college resumed some classes with part-time non-union faculty members.

Negotiations, which reached an impasse early last month, resumed last week with a state mediator.

RIT Suspends 10 Students in Grade-Selling Scheme

The Rochester Institute of Technology has suspended 10 students, some for as long as three academic quarters, following the discovery of a grade-selling scheme there. As many as 58 students have been implicated in the scandal.

The cheating took place over the past four years in two independent-study statistics courses offered by the institute's business college. Both courses have been dropped.

According to institute officials, students in those courses paid teaching assistants—who corrected tests—for better grades. All of those suspended—eight of whom were teaching assistants—will also be required to perform between 100 and 300 hours of community-service work.

An academic-conduct committee in the business college is expected to begin its own review of the matter soon.

FBI Maintained Files on Campus Homosexuals

The Gay and Lesbian Alliance at Stanford University has obtained documents from the Federal Bureau of Investigation showing that the agency kept files on homosexual-student organizations at four San Francisco–area campuses.

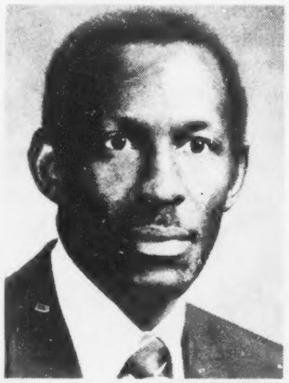
The files, covering the years from 1971 through 1975, include information on groups at Stanford, the University of California at Berkeley, California State University at Hayward, and the College of San Mateo. They were obtained under the Freedom of Information Act.

375 Colleges Plan Teach-Ins Against Nuclear War

Teach-ins on ways to prevent nuclear war will be held November 11 on more than 375 college and university campuses, according to the Union of Concerned Scientists, one of four organizations sponsoring the activities.

The other sponsors are the Lawyers Alliance for Nuclear Arms Control, the Physicians for Social Responsibility, and United Campuses to Prevent Nuclear War.

Curators Fire President at Lincoln U. in Missouri



LINCOLN UNIVERSITY

James Frank, above, has been fired as president of Lincoln University in Missouri by the institution's board of curators, he said last week.

The only reason given for his dismissal was that a "new style of leadership is desirable" at the university, according to Mr. Frank.

He called the abrupt nature of his dismissal a "disservice to the university."

Otis A. Jackson, chairman of the board of curators and assistant provost at the University of Missouri at Columbia, would not say whether Mr. Frank had been dismissed, but he did say the board planned to meet to act on the matter.

Mr. Frank, 52, has been president of Lincoln since 1973. He is also president of the National Collegiate Athletic Association, the only black and the only college president ever to hold that post. His two-year term as president of the N.C.A.A. expires in January.

'Options in Education' Canceled by NPR

"Options in Education," the eight-year-old National Public Radio program that bills itself as the only nationally broadcast series devoted exclusively to education issues, is going off the air at the end of January.

Earlier this year, the weekly program was honored with the thirty-fourth annual George Polk Award for its series "Juvenile Crime, Juvenile Justice."

The program's staff was told of the cancellation a week before the public announcement last week.

An N.P.R. spokesman said budget cuts were responsible for the program's demise. "This cancellation is not something we're happy about," she said, "but we are faced with massive budget cuts in all program areas."

Police Investigate Murder of National U. Dean

Police have so far found no substantial clues in their investigation of the murder of Daniel C. Jordan, dean of the school of education at the National University in San Diego. He was found stabbed to death in a parking lot in Stamford, Conn.

Mr. Jordan, a former Rhodes Scholar, had been in New York to deliver a speech about his educational philosophy at a meeting of the Association for the World University.

A New York City police officer was told that Mr. Jordan, who was a national leader of the Bahai faith, had been murdered by an "Iranian hit squad," but a spokesman for the church's national office discounted that possibility. Bahai followers have been persecuted in Iran for almost a century.

U. of Maryland Professor Named in Kickback Scheme

Al-Tony Gilmore, an associate professor in the Afro-American Studies program at the University of Maryland, was indicted last week on charges of accepting kickbacks totaling more than $24,000 in return for giving three graduate students academic credits that they had not earned or student assistantships for which they had done no work.

The indictment followed an investigation by the Maryland attorney general's office, which acted on information provided by the university in June. Mr. Gilmore, who had been chairman of the Afro-American Studies program, was relieved of that post after the investigation began but continues to teach his courses, a university spokesman said.

MIT Plans Fellowships for Science Journalists

The Massachusetts Institute of Technology has established a program of fellowships for "science and technology journalists" similar to those awarded by the Nieman Foundation for Journalism at Harvard University.

Winners of the fellowships will spend one academic year at M.I.T. The fellowships have been named for Vannevar Bush, Presidential science adviser during World War II and former chairman of the M.I.T. Corporation, who died in 1974.

A spokesman at M.I.T. said the fellowships were being supported with grants of $500,000 from the Andrew W. Mellon Foundation

New York's Appropriations for 1982-83

The following data were submitted too late to be included in the Fact-File reporting annual state appropriations for higher education (*The Chronicle*, October 20). The figures are compiled by M. M. Chambers, professor of educational administration at Illinois State University. The full report, including additional footnotes, will be available after November 15 from the National Association of State Universities and Land-Grant Colleges, One Dupont Circle, Washington 20036. The price is $3.50 a copy for nonmembers.

	Appropriations 1982-83 (add 000)	2-year change
NEW YORK		
SUNY center		
Stony Brook	$ 158,492	+39%
Buffalo	128,382	+20%
Albany	63,988	+19%
Binghamton	41,633	+17%
SUNY medical ctrs	161,737	+32%
SUNY colleges		
Buffalo	33,284	+18%
Brockport	29,850	+14%
Oswego	26,589	+13%
Oneonta	21,909	+17%
SUNY colleges—continued		
New Paltz	21,562	+14%
Plattsburgh	19,795	+14%
Cortland	20,716	+21%
Geneseo	19,406	+14%
Potsdam	19,339	+19%
Fredonia	18,274	+21%
Purchase	15,962	+11%
Old Westbury	11,947	+27%
Statutory colleges		
Cornell U	67,777	+16%
Alfred U	4,195	+18%
Specialized colleges		
Environmental Science & Forestry	13,478	+17%
Empire State	9,726	+14%
Technology	8,130	+16%
Maritime	6,664	+16%
Optometry	7,464	+42%
Ag & tech colleges	7,464	+18%
University programs	92,522	n/c
Community colleges	189,046	+ 7%
Private colleges	126,337	+30%
Student aid	315,600	+20%
Other appropriations	576,055	n/c
Less student fees and other income	−294,541	−106%
Total	**$ 2,010,001**	**+22%**

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Private Colleges Report 16,000 Fewer Freshmen

By JACK MAGARRELL

WASHINGTON

Private colleges and universities have 16,000 fewer freshmen this fall than they had a year ago, the National Institute of Independent Colleges and Universities estimated last week. But total enrollment at such institutions has declined by only 0.8 per cent, according to the institute—evidently the first time it has dropped since 1971.

Results of a survey of more than 1,200 of the country's 1,500 private colleges and universities showed an overall decline of 3.8 per cent in enrollment of new first-year students.

Julianne Still Thrift, executive director of the institute, said the decline would mean a loss of about $250-million in tuition revenue for the private institutions over the next four years.

The drop in the number of freshmen is widespread, with 64 per cent of the campuses reporting declines, according to the institute. But it is not distributed evenly: 50 per cent reported a loss of 5 per cent or more; 33 per cent reported a loss of 10 per cent or more.

About 17 per cent of the private colleges and universities reported their freshman classes had increased by 10 per cent or more.

The largest, most pervasive losses of first-year students were at less selective liberal-arts colleges and at comprehensive colleges—institutions that enroll more than 1,500 students and offer liberal arts and at least one professional program.

Two in five of the less selective liberal-arts colleges and a third of the comprehensive colleges reported declines of 10 per cent or more.

Losses in freshman enrollment averaged about 6 per cent in the mid-Atlantic and Midwestern states, compared with average losses of about 2 per cent in other regions, according to the survey.

The decline in total enrollment at private institutions was less than 1 per cent, largely as a result of an increase of nearly 3 per cent in the number of part-time students.

The Education Department's National Center for Education Statistics has reported an increase in total enrollment at private colleges and universities every year since the fall of 1971, when it declined by 0.1 per cent.

The increase last fall was 3.2 per cent; two years ago it was 4.1 per cent.

Ms. Thrift said the increase in enrollment of part-time students and the decrease in full-time enrollment "tend to confirm reports from campuses that some students are reducing their course load so they can afford tuition at the college of their choice."

Commenting on the results of the survey, John D. Phillips, president of the institute and of its companion organization, the National Association of Independent Colleges and Universities, said:

"It is clear that the sluggish economy, combined with federal cuts in student aid and the threat of deeper cuts, is forcing new students to abandon their plans to attend independent colleges.

"Instead, they are postponing their higher education or, more often, opting for less expensive, government-run institutions."

A full report on the enrollment survey will be published next week. Copies will be available at $2.50 each from the National Institute of Independent Colleges and Universities, 1717 Massachusetts Ave. N.W., Washington 20036.

FACT-FILE

Changes in Fall Enrollment at Private Institutions, 1981 to 1982

Changes in headcount enrollment

	Undergraduates				Other students			Total
Type of institution	Freshmen	Full time	Part time	Total	Professional	Graduate	Unclassified	
Universities	− 2.11%	− 0.61%	− 1.03%	− 0.66%	− 0.67%	− 1.26%	−10.32%	− 1.52%
Comprehensive colleges	− 5.78%	− 1.73%	+ 0.69%	− 1.28%	+ 1.56%	− 2.42%	− 4.28%	− 1.55%
Liberal-arts colleges								
Selective	− 2.49%	− 1.62%	+ 5.66%	− 1.10%	− 0.43%	+ 7.97%	− 0.91%	− 0.87%
Less selective	− 5.35%	− 1.88%	+ 5.90%	− 0.51%	+ 1.95%	+ 4.20%	+ 2.01%	− 0.07%
Two-year colleges	− 0.77%	− 1.51%	+ 9.00%	+ 0.90%	—	—	+14.28%	+ 1.38%
Specialized institutions	− 1.32%	+ 0.33%	+ 3.89%	+ 1.04%	+ 1.28%	+ 2.83%	− 2.19%	+ 1.23%
Region								
Midwest	− 5.58%	− 2.56%	+ 4.28%	− 1.30%	+ 0.79%	+ 1.71%	− 4.27%	− 1.07%
Mid-Atlantic	− 6.08%	− 2.49%	+ 3.61%	− 1.56%	− 1.40%	− 1.49%	− 7.71%	− 2.02%
Northeast	− 1.98%	− 0.34%	+ 0.68%	− 0.16%	+ 1.52%	− 1.12%	− 1.64%	− 0.35%
South	− 1.77%	− 0.16%	+ 2.42%	+ 0.19%	− 0.02%	− 0.75%	+ 3.84%	+ 0.21%
West	− 2.05%	− 0.42%	+ 3.55%	+ 0.26%	+ 2.23%	− 1.02%	− 5.69%	− 0.20%
Total	**− 3.81%**	**− 1.35%**	**+ 2.82%**	**− 0.67%**	**+ 0.51%**	**− 0.65%**	**− 3.93%**	**− 0.80%**

Proportion of institutions gaining or losing full-time freshmen

	Institutions reporting losses				Institutions reporting gains			
Type of Institution	More than 10 per cent	5 to 10 per cent	Less than 5 per cent	Total	Less than 5 per cent	5 to 10 per cent	More than 10 per cent	Total
Universities	12.50%	15.00%	30.00%	57.50%	25.00%	15.00%	2.50%	42.50%
Comprehensive colleges	33.71%	24.16%	22.47%	80.34%	10.11%	3.93%	5.62%	19.66%
Liberal-arts colleges								
Selective	29.81%	11.54%	15.38%	56.73%	18.27%	13.46%	11.54%	43.27%
Less selective	41.32%	14.83%	8.52%	64.67%	11.67%	4.10%	19.56%	35.33%
Two-year colleges	26.27%	12.71%	11.86%	50.84%	8.47%	8.47%	32.20%	49.14%
Specialized institutions	36.23%	10.14%	9.42%	55.79%	13.40%	7.97%	21.74%	43.11%
Region								
Midwest	35.18%	18.58%	11.07%	64.83%	10.67%	5.53%	18.97%	35.17%
Mid-Atlantic	36.45%	14.95%	15.89%	67.29%	14.95%	8.88%	8.41%	32.24%
Northeast	34.76%	12.20%	14.02%	60.98%	15.24%	9.76%	14.02%	39.02%
South	31.55%	14.97%	14.97%	61.49%	8.02%	4.28%	25.67%	37.97%
West	32.05%	12.82%	11.54%	56.41%	16.67%	5.13%	21.79%	43.59%
Total	**34.38%**	**15.29%**	**13.62%**	**63.29%**	**12.50%**	**6.81%**	**17.19%**	**36.50%**

SOURCE: NATIONAL INSTITUTE OF INDEPENDENT COLLEGES AND UNIVERSITIES

Demand Grows for Reforming High Schools

Continued from Page 1

high schools, begun two years ago by the Carnegie Foundation, has shown that "some high schools now offer as many as 600 different subjects." Others may require three or four years of English, but the courses may not have anything in common from school to school. "They can range from work on the yearbook at one school to a course on film that specifies no writing at another," he says.

He says the Carnegie study has also found that "an unwritten compact has developed between students and teachers at some schools. The teachers seem to be saying, 'You keep order and I won't push you.' "

As a result of those and other conditions, Mr. O'Keefe says, "one-quarter of high-school students drop out every year. Only half of those who graduate go to college, and 30 to 40 per cent of those have to take remedial courses."

Theodore R. Sizer, who is directing a five-year study of high schools for two secondary-education associations, has found that teachers are overwhelmed by "issues of overload and underpay—such extreme issues they boggle the mind."

Mr. Sizer says his preliminary findings have shown, for example, that "the typical high-school English teacher has five sections of English, with 30 students in each section. His classes meet five days a week for 55 minutes. He has supervisory duties for five hours each week. He averages four hours of class preparation when he should have half an hour for each class. He supervises a school activity for four hours."

Mr. Sizer says that teacher "earns $27,800, so he has a second job selling insurance to help support his family. With a lot of cutting and fudging, he still works a 50-hour week."

"Those who are not in the schools fail to realize how thin the line is and how heavy the load for teachers," says Mr. Sizer, who was headmaster at Phillips Academy in Andover, Mass., before he undertook the high-school study last year for the National Association of Secondary School Principals and the National Association of Independent Schools.

Infusing General Education

About 300 educators from secondary schools and colleges and people from foundations, associations, and other organizations concerned with education met at a symposium here last week to consider preliminary findings from some of the two dozen national high-school studies and projects currently under way, and to propose possible solutions to the problems of secondary education. The College Board sponsored the symposium, which was called "High School 1985 and Beyond."

An infusion of general education would improve the high-school curriculum, said John Van Doren, one of about 20 educators who developed the recent Paideia Proposal, which advocates a common course of study for all students beginning about age 5 and continuing through high school. "Paideia" is the Greek word for general or nonspecialized learning.

"Most of what goes on in college general-education courses can and should be down at the secondary level," said Mr. Van Doren, who is executive director of *Great Ideas Today*, an annual publication of Encyclopaedia Britannica.

"There are some courses, such as science and mathematics, where students should have progressive study from the simple to the complex," Mr. Van Doren said. "We can no longer get away with teaching arithmetic for eight years—and badly at that.

"There are also courses that are not progressive, such as the humanities. Study of literature and art should go on at any age. If students begin young to analyze literature, they will be in a better position to deal with ideas when they get older."

Secondary education will be improved "when individual teachers meet and make decisions about what works specifically in their place," said O. L. Davis, Jr., a professor of curriculum and instruction at the University of Texas at Austin.

Michael O'Keefe

Mr. Davis, who is directing a study in which teachers and administrators in 17 high schools are examining their curricula, said, "Blue-ribbon committees can tell schools what to do, but individual teachers must hammer out the ideas."

"The high schools cannot be changed overnight," said Adrienne Y. Bailey, the College Board's vice-president for academic affairs. "It will take a long-term effort. Meanwhile, the secondary schools and the colleges must take action together."

She said some of the high-school studies and projects, such as the College Board's decade-long Educational EQuality Project, are already having some effect in reforming secondary education.

Although the "EQuality" project began only two years ago, Ms. Bailey said, colleges are beginning to use its statements on "basic academic competencies and study areas" to define the skills and knowledge students should have by the time they graduate from high school.

The project has identified six basic skills that high-school students should learn: reading, writing, speaking and listening, mathematics, reasoning, and studying. It has also identified six areas in which students should develop some proficiency: English, a second language, history and social studies, mathematics, science, and the visual and performing arts. The standards, which have been explained in statements circulated among educators, represent a consensus of more than 1,000 school and college teachers.

Ms. Bailey said some education organizations, such as the American Federation of Teachers (A.F.L.-C.I.O.) and the State Higher Education Executive Officers Association, have formally endorsed all or part of the statements on standards.

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News Summary

Articles on inside pages

Traditionally well-regarded universities remain high on the list in a new assessment of 522 doctoral programs in the humanities. Story and Fact-File on Pages 4-6.

Standardized testing could be dramatically changed in the next few years by the use of microcomputers. Story on Page 4.

After 18 months in office, George A. Keyworth, II, President Reagan's science adviser, is still a controversial figure among scientists. Story on Page 11.

Edward A. Knapp, a former administrator at Los Alamos National Laboratory, has been appointed director of the National Science Foundation. Story on Page 12.

Within three years, the University of Washington plans to eliminate 24 degree programs and reduce enrollment by about 5,000. Story on Page 3.

Sports medicine is no longer the exclusive province of physical-education majors. David L. Costill, director of the Human Performance Laboratory at Ball State University, is one of the leaders in the growing field. Stories on Page 15.

The conservative scholar Robert A. Nisbet airs his opinions in a new book, *Prejudices*, recently published by the Harvard University Press. Story on Page 21.

Dorothee Wilms, West Germany's new Minister for Education and Science, believes that country's government has been too generous with its financial aid for students. Story on Page 19.

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How Education and Science Leaders in Congress Fared at the Polls

The Winners

Sen. Hatch
R–Utah

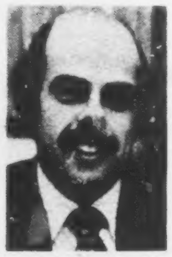
Sen. Stafford
R–Vermont

Rep. Natcher
D–Kentucky

Rep. Perkins
D–Kentucky

Rep. Simon
D–Illinois

Rep. Walgren
D–Pennsylvania



Rep. Waxman
D–California

The Losers

Sen. Schmitt
R–New Mexico

Rep. Heckler
R–Massachusetts

Rep. Peyser
D–New York

Details on Pages 8 and 9

Decline in Faculty Morale Laid to Governance Role, Not Salary

Involvement in college planning deemed a major factor

By JACK MAGARRELL

The morale of college faculty members, which has declined in the last decade, seems to be "unrelated to changes in college income or average faculty salary," a national study has found.

Rather, the study found, it is the faculty members' involvement in planning and in the governance of their institutions that has the greatest effect on their morale, on their commitment to the purposes of the college, and on their support of its administration.

The 10-year study by the Institute of Higher Education at Columbia University's Teachers College took the financial pulse of 93 colleges and universities and weighed the opinions of more than 5,000 faculty members.

It set out to explore the relationships between college finances and faculty members' assessments of the institutions in the period roughly between 1970 and 1980.

Among other things, the faculty members said that:

▶ Innovation is rarer on today's campuses than it was a decade ago.

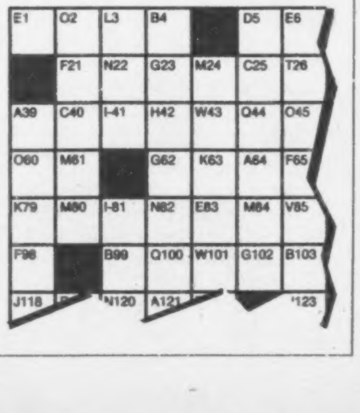
▶ When changes in curriculum are made, they are increasingly likely to be

Continued on Page 28, Column 1

An Acrostic Puzzle for Academe

If you can describe an "academic casualty" in 7 letters, a "gridiron bonus" in 8 letters, and a "cultural sign" in 14 letters (two words), you're well on your way to solving *The Chronicle Acrostic*—a new, monthly challenge to our readers.

The first Chronicle Acrostic appears on Page 26.



U.S. Backs Suit on TV Football by 2 Universities

Justice Dept. files brief in case challenging NCAA

DENVER

Two universities challenging the National Collegiate Athletic Association's right to control the televising of their regular-season football games received a big boost last week when the Justice Department filed a friend-of-the-court brief supporting their position in a federal court of appeals.

The University of Georgia and the University of Oklahoma have sued the N.C.A.A., charging that the association violates federal antitrust laws by insisting on exclusive control of televising college football and by threatening sanctions against institutions that question its control.

In September, U. S. District Court Judge Juan G. Burciaga ruled in favor of the universities and struck down three contracts totaling $281-million between the N.C.A.A. and television networks.

The N.C.A.A., arguing that controls are necessary to prevent chaos in the televising of college football, appealed that decision to the U. S. Court of Appeals for the Tenth Circuit here and obtained a temporary stay of the judge's order. A hearing is scheduled next week.

NCAA 'Clearly Restrains' Members

The restrictions that the N.C.A.A. imposes on its member institutions "were properly found to be an unreasonable restraint of trade" by the district judge, the Justice Department said in its brief.

Although the department said that Judge Burciaga had erred in ruling that the N.C.A.A.'s controls were a "*per se* violation" of the Sherman Antitrust Act, it argued that the evidence supported his other conclusions. "The challenged conduct of the N.C.A.A.," the government's brief said, "clearly restrains the freedom of N.C.A.A. members to negotiate independently for the sale of television rights to college football games."

The brief continued: "Plaintiffs have demonstrated that the N.C.A.A., comprised as it is of all the major college athletic competitors, has utilized the advantages con-

Continued on Page 18, Column 1

Morale

Continued from Page 1

based on financial considerations, rather than on educational merit.

▶ They feel less involved in the important decisions about running their institutions.

▶ Faculty morale is especially low at community colleges.

▶ Colleges give less consideration to the opinion of students in decisions affecting them.

▶ Presidents of private colleges and universities have a freer hand in dealing with personnel problems than do the heads of public institutions.

▶ Colleges are more sensitive to the needs of undergraduates and are making greater efforts to reach out to serve the needs of the surrounding community.

In summarizing the preliminary findings for *The Chronicle*, the director of the study, Richard E. Anderson, an associate professor of higher education at Columbia's Teachers College, said that in general the "effectiveness of the institutions has remained unchanged."

Although there have been "trouble spots," he said, the budgets of most institutions have kept pace with inflation and enrollment growth during the past 10 years.

Some colleges have managed during that period to become stronger though poorer, according to Mr. Anderson.

"Deprived institutions can thrive while the academic programs at colleges with growing budgets can deteriorate," he said. "Administrative style and leadership appear to be the significant factors."

The Institute of Higher Education used three kinds of data in the study:

▶ Financial and statistical profiles of each of the 93 institutions for every third year from 1968 thorough 1980, to provide a base for the 1970 and 1980 comparisons. All types were represented: public and private two-year and four-year institutions, liberal-arts colleges, and major research universities in all parts of the country.

▶ Assessments of faculty opinion at the 93 institutions, using standardized measurements developed by the Educational Testing Service to evaluate institutions on such items as concern for undergraduate learning, democratic governance, meeting local needs, concern for innovation, and institutional spirit. More than 5,100 faculty members returned the questionnaires in 1980-81. Their responses were compared with those of more than 6,900 faculty members at the same institutions who had answered the same questionnaires in the late 1960's and early 1970's.

▶ Interviews with administrators and faculty members at 13 institutions that seemed not to fit conventional patterns. Those institutions include some that suffered major budget cuts but appeared to be stronger at the end of the decade than at the beginning, and some that had less success despite growing enrollments and larger budgets.

The study was financed by the Lilly Endowment. A full report will be available from the Institute of Higher Education next spring.

In the first survey of faculty members, 61 per cent said their morale was high; in the latest survey, only 51 per cent held that view.

Mr. Anderson said faculty salaries at the 93 institutions had lost 20 per cent in purchasing power during the decade, sufficient cause for a drop in any group's spirits. But the study found that faculty morale was much more closely related to changes in governance and planning.

The proportion of faculty members who said their institution's system of governance involved the sharing of authority between administrators and faculty members declined from 64 per cent in 1970 to 44 per cent in 1980.

At institutions that received high ratings from the faculty members, administrators had involved the faculty in planning and decision making, Mr. Anderson said.

Those administrators were much more likely than their counterparts at other institutions to have made painful and unpopular decisions, he said, but the administrators at the more favorably rated institutions "paid almost excessive attention to the hiring, promotion, and termination" of faculty members.

Personnel Practices Differ

The study revealed some differences between administrators at public and private institutions in their approaches to personnel decisions.

Those at private colleges took pains to involve faculty members in solving college problems, he said, but they also were able to make unpopular decisions with fewer restraints than their colleagues at public institutions.

"Independent institutions were more likely to be seen as in jeopardy by their faculty members," Mr. Anderson said. "The presidents of these colleges therefore had a freer hand to make decisions in the interests of the college."

Faculty members at public colleges were more likely to perceive the financial problems of their institutions as a "failure" of the administration because it did not get a large enough appropriation, he said.

Presidents of public institutions used two approaches to acquire "leadership legitimacy," Mr. Anderson said.

One was to obtain special outside funds to distribute to faculty members as incentives, such as awards for travel and research.

The other was to appear to be especially successful in the politics of budgeting. "The perception that the president fought an extraordinarily good fight for the college," Mr. Anderson said, appears to have mattered more than whether the budget increased.

As an example of the connection between democratic governance and faculty morale, Mr. Anderson cited a community college that participated in the study. When its enrollment dropped 3 per cent, the governing board of the community-college system hired a chancellor to "straighten things out."

"In a zeal for efficiency, the chancellor unilaterally instituted minor budget cuts, program changes, and work rules," Mr. Anderson said. Among the last was a requirement that faculty members be in their offices or classrooms 25 hours a week.

Administration 'Lost Control'

"The faculty did not believe that the financial crisis was that severe, nor that the changes were reasonable," Mr. Anderson said. "They became alienated." Faculty morale plummeted, and professors who had been working 50 or 60 hours a week began working the prescribed 25.

"The administration, by trying to systematize and streamline management, had lost control of the faculty," Mr. Anderson said.

As a group, the 10 community colleges in the survey showed a dramatic decline in institutional spirit, concern for innovation, and democratic governance.

The proportion of community-college faculty members who agreed that faculty morale was high dropped from 65 per cent in 1970 to 41 per cent in 1980.

Mr. Anderson said evidence from the surveys and campus interviews suggested that faculty members at the public two-year institutions felt a loss of control.

"Presidents, system chancellors, and local politicians are more likely to be making the decisions," he said.

Mr. Anderson said the study showed that colleges and universities had increased—slightly but significantly—their attention to the education of undergraduates, were making substantially greater efforts to meet the needs of the communities around them, and were offering more remedial courses.

Those actions may be reflections of what Mr. Anderson called the "No. 1 concern"—enrollment.

"There is evidence that most of the institutions have been scrambling for students," he said.

Over the past decade, the survey found, the institutions in the survey accepted a larger proportion of the students who applied; a smaller proportion of those accepted actually enrolled; and the average test scores of those who enrolled declined by 6 per cent.

By 1980, the institutions surveyed were accepting 82 per cent of the applicants, compared with 74 per cent a decade earlier. The proportion of those accepted who actually enrolled declined from 61 per cent in 1970 to 55 per cent in 1980.

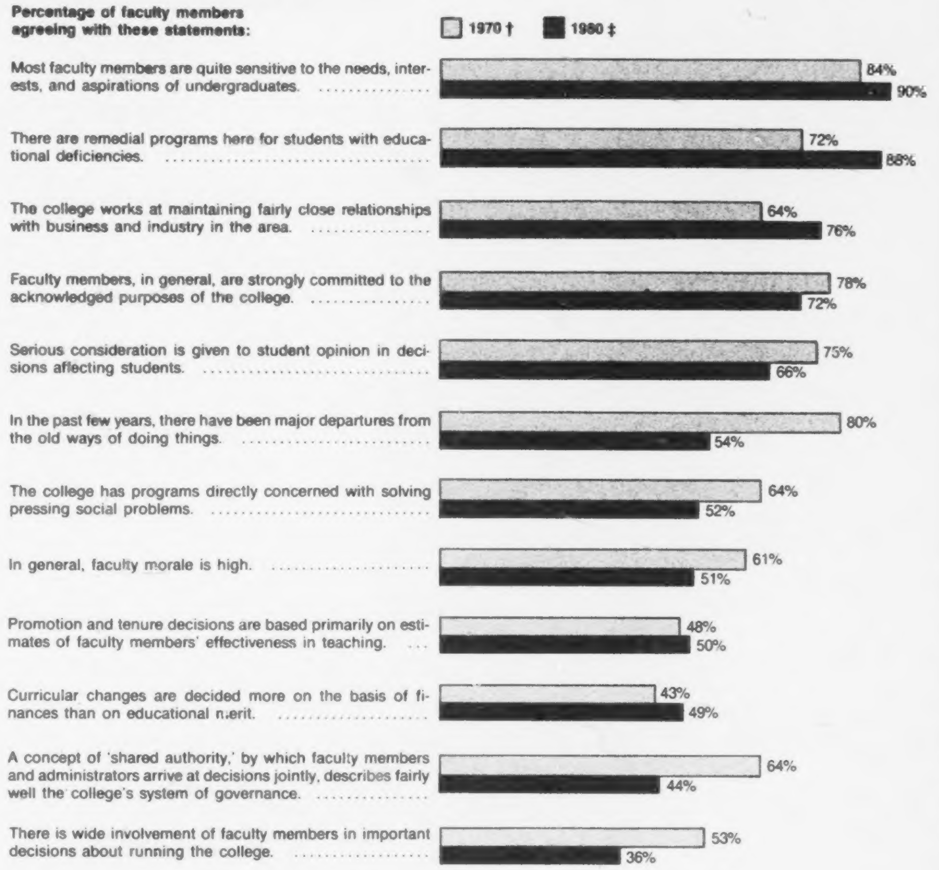
The tightening of budgets through the 1970's was accompanied by a decline in colleges' willingness to experiment, the study found. Ten years ago, when faculty members were asked if there had been "major departures from the old way of doing things," 80 per cent said Yes. At the end of the decade, only 54 per cent said there had been.

The commitment of institutions and their students to improving society has declined slightly, in the opinion of faculty members.

Mr. Anderson said he found it reassuring that the study indicated that an institution's success, as reflected in faculty opinion, was not inalterably bound to its financial condition.

"It is foolish to assert that finance has no effect on successful college functioning," he said. "Surely it does. What these data do indicate is that within the ranges of financial variation that occurred at these 93 colleges and universities, other things like leadership style appear to be more important."

Faculty Members Assess a Decade's Changes



† Based on responses in the late 1960's and early 1970's of about 6,900 faculty members at 93 institutions.

‡ Based on responses in 1980-81 of about 5,100 faculty members at the same 93 institutions included in the earlier survey.

CHRONICLE CHART BY PETER H. STAFFORD

SOURCE: INSTITUTE OF HIGHER EDUCATION, TEACHERS COLLEGE, COLUMBIA UNIVERSITY

The chart above shows responses to some of the 132 items in a survey of what faculty members thought of their institutions in 1970 and 1980.

A College's 'Sense of Purpose' Leads to Success

Doane College, a small, church-related, liberal-arts college in Crete, Neb., was cited in a study by the Institute of Higher Education of Teachers College of Columbia University as an example of an institution that is far more successful than one might expect.

Doane's enrollment peaked at 750 in the early 1970's and declined to 689 in 1980. The college increased the amount it spent per student from $1,500 to $4,170, but much of the money went into coping with inflation, higher utility bills, debt service, and other uncontrollable costs. The purchasing power of faculty salaries dropped 20 per cent.

"What is different about Doane," says Richard E. Anderson, director of the Teachers College study, "is the spirit of the administration and faculty.

"They know they face difficult problems, but they are confronting them with a sense of purpose and community. And they seem to be succeeding."

In 1980, faculty members gave the college higher ratings on every measure on the survey than they had given in 1970. Sharp increases were noted in faculty morale, in democratic governance, in concern for innovation and undergraduate learning, and in faculty confidence in the administration.

The administration at Doane College, Mr. Anderson says, is "organized and systematic but requires heavy faculty involvement."

In 1968, only a handful of professors at Doane said they knew about long-range planning, Mr. Anderson says. But by 1980, "every faculty member was aware of the planning activities, and most felt they were very involved in the process." —J.M.

U. of Washington Plans to Drop 24 Degree Programs

By BARRY MITZMAN

The University of Washington has announced plans to eliminate 24 degree programs and reduce its enrollment by nearly 5,000 over the next three years.

The announcement gave the first clear indication of how and where university administrators will wield the ax in response to a 7-per-cent cut in state appropriations ordered earlier this year.

President William P. Gerberding said the university must permanently reduce its size and scope in order to maintain the excellence of the programs that remain.

"The damage has been as contained as possible," Mr. Gerberding said.

Plans call for eliminating degree programs in urban planning, Near Eastern languages, kinesiology, nutrition, children's drama, textiles, art education, business education, music education, and dance, among others.

Fewer students will be admitted to professional programs in dentistry, medicine, education, social work, architecture, and public administration.

Total university enrollment will decline from over 33,000 students to about 28,500.

Although some 30 tenured positions will be eliminated, attrition and reassignment are expected to avoid layoffs of tenured faculty members, according to the provost, George M. Beckmann.

However, an undetermined number of untenured members of the faculty and staff will be dismissed, he said.

"In 18 years, this is my worst moment," Mr. Beckmann said in announcing the cuts, which are expected to total $13.8-million.

The proposals will be reviewed by faculty committees over the next five months. But unless other savings are found, the programs chosen for elimination are doomed.

UNIVERSITY OF WASHINGTON

George M. Beckmann

"It's like the Japanese legal system," said Mr. Beckmann, an Asian scholar. "They are guilty until proven innocent."

The cutback plan was developed after state legislators voted to trim $21-million from the $295-million that they originally appropriated for the university's operations in the 1981-83 biennium.

Lawmakers acted to avoid a state budget deficit, due to Washington's faltering timber-based economy.

Some legislators criticized the university's announcement of program cuts just four days before the November elections.

"The timing is phenomenal," said the state's House Majority Leader, Gary A. Nelson, terming the announcement "a political-football routine."

Faculty response to the cuts was muted, as the action had been expected for some time.

But disputes over where the cuts should come have led to some animosity, said James D. West, chairman of the faculty senate.

"I preside over a bitterly divided faculty," Mr. West said.

---

job of the dean of college life and development.

The dean, Cathy Addy, resigned together with her secretary and the director of housing after the job was redefined. She said she had been demoted. Mr. St. Pierre had put Ms. Addy and the other two officials on probation for "wrongful usage of college properties."

The board of trustees has agreed to meet with the faculty and personnel associations to "open up lines of communication," a college spokesman said.

Students Question Rehiring of Oklahoma's Banowsky

A group of students at the University of Oklahoma presented a petition to the institution's regents last week objecting to the manner in which President William S. Banowsky was recently rehired.

Mr. Banowsky left the Oklahoma presidency on September 1 to become director of the Greater Los Angeles Chamber of Commerce, but asked for his old job back last month. The board voted unanimously to rehire him, and he returned to his duties last week.

The petition, signed by 400 students, charged that the appointment was not included on the agenda of the regents' meeting at which the decision was made.

The regents said state open-meeting laws and affirmative-action guidelines were followed.

Seton Hall Faculty Union Affiliates with AFT

Faculty members at Seton Hall University, who have been represented by an independent union, have voted 173 to 126 to affiliate with the American Federation of Teachers (A.F.L.-C.I.O.).

The union cannot be certified as the exclusive faculty representative until the National Labor Relations Board rules on a university claim that faculty members are managers and therefore not entitled to bargain collectively under the National Labor Relations Act.

Before the vote, the university ended 10 years of bargaining with the independent union, which has never been a certified representative. The university cited the Supreme Court's *Yeshiva* decision.

A regional office of the N.L.R.B. has refused a faculty request to halt hearings on the university's claim and let the A.F.T. affiliate negotiate without the protection of federal labor law.

National Enrollment Survey a Victim of Budget Cuts

A national survey of college enrollment, conducted every fall for the past 62 years, has fallen victim this year to budget cutting at the University of Alabama.

J. Ernest Mickler, assistant vice-president for planning and operations at the university, says the 1982 survey was canceled because of severe budget problems.

Mr. Mickler directed the survey for the previous three years, taking over from Garland G. Parker, now retired, who was then executive director of the office of enrollment policy and educational research at the University of Cincinnati. Mr. Parker directed the enrollment survey for 19 years. Before that, the University of Cincinnati's longtime president, the late Raymond Walters, directed it for 40 years.

Corrections

▶ An article in *The Chronicle*, September 8, identified David E. E. Sloane as the editor of the annual journal *Essays in Arts and Sciences*. The editors of the journal are Bruce Tyndall and Douglas Robillard, both of the University of New Haven. Mr. Sloane served as a guest editor for a special issue devoted to nineteenth-century American industry and culture.

▶ Following are corrections of data on tuition and fees that appeared in *The Chronicle*, August 4:

	1981-82	1982-83	
	Tuition and fees	Tuition and fees	Added out-of-state tuition
INDIANA Tri-State U ...	$3,360	$3,744	
KANSAS Ft Hays St U .	$ 795	$ 833	$ 833
OHIO Cuyahoga CC	$ 720	$ 720	$ 765

Set Own Rules for Commercial Relations, Universities Urged

WASHINGTON

Instead of abiding by a uniform national policy, universities should develop their own guidelines to prevent commercial interests from subverting free academic inquiry, according to the the Association of American Universities.

In a report sent to Congress, the association said it planned to serve as a "clearinghouse" of information to aid universities and industries in developing policies to govern their commercial relationships.

But it would not, the A.A.U. said, "promulgate a code of ethics to guide the behavior of institutions and their faculties."

The association undertook a study of the issue early this year at the request of Rep. Don Fuqua, Democrat of Florida and chairman of the House Science and Technology Committee, and Rep. Albert Gore, Jr., Democrat of Tennessee and chairman of the committee's Subcommittee on Investigations and Oversight.

Both Congressmen said they were concerned that the increased involvement of industry in university research projects might skew research priorities toward commercial goals, increase secrecy among researchers, and affect the ability of universities to provide unbiased advice on policy issues.

'Thoughtful Discussion'

In its report to Mr. Fuqua and Mr. Gore, the association concluded that it was "unlikely" that universities received more than 5 per cent of their research support from industry or that the percentage would increase substantially in the future.

Although the report acknowledged that ethical issues might arise concerning the relationships between industry and academe, and although individuals or institutions might on occasion act "unwisely or improperly," it said that "the conditions exist for intelligent and thoughtful decision making on these issues at the level of individual institutions."

"We were very reluctant to state a firm policy" that would govern universities across the country, said Robert M. Rosenzweig, vice-president for public affairs at Stanford University and president-elect of the association, in an interview last week. He headed the panel that prepared the report.

"For example," he said, "Stanford doesn't have a policy that prohibits faculty members from serving as executive officers of corporations, but M.I.T. and Harvard do."

It's not that "they're right and we're wrong," he added, but that Stanford employs different safeguards to prevent faculty members from being diverted from their teaching and research by their business interests.

The association's report suggests a number of principles that would "yield sound policy" for institutions developing guidelines for commercial relationships.

It encourages openness in research, recommends that the education of graduate students and postdoctoral fellows take precedence over commercial obligations, and says that the choice of deciding research priorities should rest with the faculty members who conduct the research.

It also says that faculty members should view research and teaching as their primary obligation and that university policies should "protect the role of the institution's officers and faculty as credible and impartial resources in debates on educational, scientific, and technological policy."

—KIM McDONALD

Notes on . . .
Computers

Students of fashion design and the humanities, as well as those in business, science, and engineering, will be using personal computers at Drexel University.

Starting next fall, all freshmen, regardless of discipline, will be required to purchase microcomputers, which the university will buy at a volume discount.

"We also plan for the faculty to have the same computers," said Drexel's president, William W. Hagerty. "Virtually everybody I know on the faculty is ready and eager to get going on the project."

"We are not trying to force a curriculum through a computer," said Bernard P. Sagik, vice-president for academic affairs, "but everyone involved, including the humanities people, already sees useful roles for the computers in their courses."

▪

PLATO gets personal, with courses from the big, computerized learning system redesigned for use on small, personal computers—the Apple II Plus, the Texas Instruments 99/4A, and the Atari 800.

The development of PLATO, an acronym for Programmed Logic for Automatic Teaching Operations, began nearly 20 years ago at the University of Illinois. It uses a big, central computer system connected to remote terminals.

Control Data Corporation, which operates PLATO, has announced that it is starting to translate PLATO's instructional programs into language that can be handled by the newer microcomputers.

▪

Students of Chaucer will have the help of a computerized bibliography when two scholars at the Virginia Polytechnic Institute and State University finish their work. Anthony Colaianne and Michael Piersol, assistant professors of English, are working on a bibliography of more than 10,500 citations of Chaucerian studies published since 1900.

▪

A chip factory, under construction at the University of California at Berkeley, will provide a $4.3-million laboratory for faculty members and graduate students exploring new ways to cram up to a million microscopic electronic elements onto each fingernail-sized chip of silicon.

▪

Medicine and computers are mixed together in Stanford University's new program offering doctoral and master's degrees in "medical information sciences." The program is designed for physicians interested in computers and for computer scientists interested in medical applications of computers.

▪

Dartmouth College, one of the pioneers in using computers for instruction, has become a participating member of EDUNET, making the facilities and programs of the college's Kiewit Computation Center available to all other members of the non-profit computing network for higher education. —JACK MAGARRELL

BEST AVAILABLE COPY

Quality of Graduate Programs Rated in 9 Humanities Disciplines

By MALCOLM G. SCULLY

WASHINGTON

Ivy League universities and major public institutions such as the University of California at Berkeley and the University of Michigan have consistently high rankings in an assessment of 522 doctoral programs in nine disciplines in the humanities published here by the National Academy Press.

The report is the second of five to be published as the result of a national study of the quality of graduate education in the United States. The first—on mathematics and the physical sciences—was published in September (*The Chronicle*, September 29).

Still to come are reports on engineering, the biological sciences, and the behavioral and social sciences.

In all, the reports will cover 26 disciplines.

The study was conducted by a committee named by the Conference Board of Associated Research Councils, which comprises the American Council of Learned Societies, the American Council on Education, the National Research Council, and the Social Science Research Council.

The nine disciplines studied in the humanities are art history, classics, English, French, German, linguistics, music, philosophy, and Spanish.

The assessment included 12 measures "related to quality," ranging from the size of an institution's faculty to the success of its graduates in finding jobs.

Four were based on a survey of the reputations of the doctoral programs. Faculty members were asked to rate:

▶ The scholarly competence and achievements of the faculty members in a stratified random sample of the departments in their field.

▶ The effectiveness of those departments in educating research scholars and scientists.

▶ The improvement of the programs over the past five years.

They were also asked to indicate how familiar they were with the programs being rated. The committee noted in its report that the "evaluators, on the average, were unfamiliar with almost one-fifth of the programs they were asked to consider.

"As might be expected, the smaller and less prestigious programs were not as well known, and for this reason one might have less confidence in the average ratings of these programs."

The results of the ratings were presented in both raw scores and in standardized scores showing how far above or below the mean of 50 each program was ranked.

Generally, the traditionally well-regarded public and private universities fared well in the ratings.

On the rating of the scholarly competence of faculty members, for instance, the University of California at Berkeley had a standardized score of 60 or higher in each of the nine disciplines.

Princeton and Yale Universities had scores of 60 or higher in seven of the nine, Columbia and Cornell Universities and the University of Michigan in six, and the University of California at Los Angeles, Harvard University, and the University of Pennsylvania in five.

In general, those institutions were the same ones that had been highly rated on earlier surveys of faculty quality. However, the ratings of programs that had improved in quality over the last five years identified some less frequently mentioned institutions.

By that measure, in eight of the nine disciplines at least one institution had a standardized score of 70 or better. They were:

ART HISTORY: the Johns Hopkins University.

ENGLISH: the University of California at Irvine, the University of Delaware, the University of Pennsylvania, and Texas A&M University.

FRENCH: Princeton University and the University of Virginia.

GERMAN: Cornell University, Princeton, the State University of New York at Albany, and Virginia.

LINGUISTICS: the University of Arizona.

MUSIC: Pennsylvania and the University of Rochester.

PHILOSOPHY: Arizona, Florida State University, Rice University, the University of Southern California, and Syracuse University.

SPANISH: Virginia.

While members of the committee said they recognized that readers of their reports would make comparisons among institutions, they emphasized throughout that no one measure could be taken as the definitive indicator of quality.

In an interview after the first report was published, Lyle V. Jones, director of the psychometric laboratory at the University of North Carolina at Chapel Hill and co-chairman of the committee, said, "By providing a number of measures, many of which are related to quality, we're hoping pragmatically that no one measure will be taken as the answer."

The ratings of the humanities programs do not include two measures of research support for specific degree programs or two measures of the publication records of faculty members in those programs.

Such information was included in the report on the mathematical and physical sciences and will be included in subsequent reports on the biological sciences, engineering, and the social sciences.

They were not included in the humanities, the committee's report says, because "comparable information for humanities programs are either unavailable or, in the committee's judgment, not relevant to an assessment of humanities programs."

Copies of the report, *An Assessment of Research-Doctorate Programs in the United States: Humanities*, are available at $10.50 each from the National Academy Press, 2101 Constitution Avenue, N.W., Washington 20036.

Members of Panel on Research Programs

Following are the members of the Committee on an Assessment of Quality-Related Characteristics of Research-Doctorate Programs in the United States:

Lyle V. Jones, director, L. L. Thurstone Psychometric Laboratory, University of North Carolina at Chapel Hill, *co-chairman.*

Gardner Lindzey, director, Center for Advanced Study in the Behavioral Sciences, Stanford, Cal., *co-chairman.*

Paul A. Albrecht, vice-president and dean, Claremont Graduate School.

Marcus Alexis, professor of economics, Northwestern University.

Robert M. Bock, dean, graduate school, University of Wisconsin at Madison.

Philip E. Converse, Institute for Social Research, University of Michigan at Ann Arbor.

James H. M. Henderson, professor of plant physiology, Tuskegee Institute.

Ernest S. Kuh, professor of electrical engineering and computer sciences, University of California at Berkeley.

Winfred P. Lehmann, professor of linguistics, University of Texas at Austin.

Saunders MacLane, professor of mathematics, University of Chicago.

Nancy S. Milburn, dean, college of liberal arts and Jackson College for Women, Tufts University.

Lincoln E. Moses, professor of statistics, Stanford University.

James C. Olson, president, University of Missouri.

C. K. N. Patel, director, Physical Research Laboratory, Bell Laboratories.

Michael J. Pelczar, Jr., president, Council of Graduate Schools in the United States.

Jerome B. Schneewind, professor of philosophy, the Johns Hopkins University.

Duane C. Spriestersbach, vice-president for educational development and research, University of Iowa.

Harriet A. Zuckerman, professor of sociology, Columbia University.

Microcomputers Expected to Bring Radical Changes in Testing

By LAWRENCE BIEMILLER

NEW YORK

Microcomputers will alter standardized admissions and placement tests radically in the next few years, speakers at the Educational Testing Service's annual invitational conference said.

They predicted that within 10 years:

▶ Students would take the Scholastic Aptitude Test and other examinations individually, using microcomputers at their high schools or colleges, rather than in large groups at times set by the E.T.S.

▶ Computerized tests would be "interactive" with the student—asking ever more challenging questions until he begins to give incorrect answers.

▶ Computer programs would not only rank a student in relation to others in his class but would analyze his strengths and weaknesses and, if necessary, begin remedial instruction on the spot.

Interactive tests, psychometricians here said, are considerably more efficient than paper-and-pencil versions now offered by the E.T.S. and other test manufacturers.

"After every item, the computer estimates the candidate's test score, based on the information so far, and selects as the next item one that will give the most additional information about the person's score," explained Bert F. Green, Jr., a professor of psychology at the Johns Hopkins University.

Because interactive tests do not waste time with items that are either too simple or too difficult for the student, as a conventional version must do to accommodate all those being tested, they can be completed in about half the time.

"We don't learn anything when a student answers correctly an item that was too easy for him, or answers incorrectly an item that was too hard," said Ernest J. Anastasio, vice-president for research management at the testing service, in an interview. "The point is to converge as rapidly as possible on the student's range of ability."

The Educational Testing Service, the country's most prominent test manufacturer, already offers a computerized career-counseling service called System for Interactive Guidance Information, or SIGI. Interactive versions of various E.T.S. tests are now being developed, and an interactive basic-skills test for use by college placement officials—the first large-scale E.T.S. test to be computerized—is expected to be to be available in the fall of 1984.

Other Advantages

A number of standardized tests used in fields outside of education would also be affected by advances in microcomputer technology.

For example, Mr. Anastasio said, the Armed Services Vocational Aptitude Battery, a standardized test administered to military recruits, now requires about eight hours—often over two days—to administer to each of the 1.2 million people who take it each year. Cutting the time in half would save the Defense Department a considerable amount of money, he said.

Computerized testing, Mr. Green said, would offer several other advantages:

▶ The student would work at his own pace.

▶ Answer sheets—and the possibility that a student might mistakenly fill in the wrong blank—would be eliminated.

▶ Incorporating videodisc players into microcomputer systems would make it possible to include action sequences in tests. This would make them less dependent on narrative passages that place an emphasis on reading ability even when other skills are being tested—as is the case, for example, with examinations for fire fighters or police officers.

▶ It would be possible to score tests instantly.

It would also be possible—as the sophistication of computer programs for tests increased—to eliminate multiple-choice questions in favor of items requiring "constructed responses"—answers consisting of numbers or words typed into the computer. This is important, said Mr. Anastasio, because "selecting the right response from among five is a very different behavior from actually working out and writing down an answer."

The psychometric methodology on which interactive testing is based has been understood for some time, Mr. Anastasio said, but test manufacturers have been obliged to wait until microcomputers became available at a reasonable price.

Mr. Green said it would be necessary to create computer programs that would be able, in choosing which questions to ask the student, to select items on the basis of both difficulty and variety of content. Programs must be created, he said, to assemble tests that are as well balanced as those produced by an experienced test editor.

Mr. Green also warned that "large amounts of data" would be needed to insure that items are properly "calibrated"—or given weights in the scoring process that correspond exactly to their difficulty. Furthermore, interactive tests require a much larger bank of items on which to draw than do conventional examinations.

After such technical problems are overcome, Mr. Green and others here predicted, it will be possible to integrate standardized testing in high-school and college curricula, making it a far more useful tool than it has been to date.

W. James Popham, a professor in the Graduate School of Education at the University of California at Los Angeles, told conference participants to "take advantage of the new situation" and create tests that will "serve as instructional catalysts." Microcomputers, said psychometricians here, will allow such tests to be administered as often as necessary—rather than once or twice in a student's career, as is now generally the case.

FACT–FILE

Evaluations of 522 Programs in the Humanities

WASHINGTON

Following are evaluations of 522 doctoral programs in art history, classics, English, French, German, linguistics, music, philosophy, and Spanish, based on a survey conducted in April, 1981, by a committee of the Conference Board of Associated Research Councils. The board includes representatives of the American Council of Learned Societies, the American Council on Education, the Social Science Research Council, and the National Research Council.

Art History

	Faculty quality (a)	Effective-ness (b)	Improve-ment (c)	Famil-iarity (d)
Boston U.	49	48	64	52
Brown U.	54	55	55	54
Bryn Mawr C.	57	61	24	59
U. of California				
Berkeley	64	61	47	64
Los Angeles	54	53	58	56
Case Western Reserve U.	40	39	39	41
U. of Chicago	53	54	37	54
Columbia U.	63	66	43	66
Cornell U.	52	53	45	48
U. of Delaware	50	53	67	51
Florida St. U.*	37	37	50	43
U. of Georgia	39	37	59	37
Harvard U.	69	68	41	68
Indiana U.	52	51	53	53
U. of Iowa	47	45	51	49
Johns Hopkins U.	58	57	73	59
U. of Kansas	45	48	50	43
U. of Maryland	49	48	52	49
U. of Michigan	58	60	48	59
U. of Minnesota	47	47	47	45
U. of Missouri	38	37	28	38
U. of New Mexico*	39	40	48	37
New York U.	70	69	51	69
U. of North Carolina	53	53	68	53
Northwestern U.*	48	48	60	52
Ohio U.	29	31	n.a.	30
Ohio St. U.*	42	42	50	43
U. of Oregon	39	39	60	37
U. of Pennsylvania	57	58	58	58
Pennsylvania St. U.	47	47	41	47
U. of Pittsburgh	53	52	48	50
Princeton U.	66	65	53	66
Rutgers U.	48	48	59	49
U. of Southern California*	31	31	45	34
Stanford U.	59	60	48	57
U. of Texas, Austin*	45	44	58	44
U. of Virginia	50	50	53	52
Washington U. (Mo.)	45	43	38	42
U. of Washington	40	40	45	35
U. of Wisconsin, Madison	41	45	39	42
Yale U.	68	68	48	67

Classics

	Faculty quality (a)	Effective-ness (b)	Improve-ment (c)	Famil-iarity (d)
Boston U.*	44	40	42	53
Brown U.	59	57	63	62
Bryn Mawr C.	59	62	47	57
U. of California				
Berkeley	67	66	62	64
Los Angeles	52	47	66	53
Catholic U.	35	39	41	27
U. of Chicago	57	51	45	54
U. of Cincinnati	50	53	39	47
Columbia U.	58	57	54	56
Cornell U.	56	57	54	55
Duke U.	49	53	58	51
Fordham U.	34	33	40	35
Harvard U.	70	70	45	67
U. of Illinois	53	58	57	53
Indiana U.	48	51	52	51
U. of Iowa	40	42	52	39
Johns Hopkins U.	46	42	18	54
Loyola U. of Chicago	36	34	59	34
U. of Michigan	61	63	57	62
U. of Minnesota	44	48	56	45
U. of Missouri	36	39	43	37
New York U.	42	36	33	44
U. of North Carolina	60	63	49	59
Ohio St. U.	47	48	54	51
U. of Pennsylvania	57	56	48	56
Princeton U.	62	63	58	63
Rutgers U.	39	37	52	42
St. U. of New York, Buffalo	47	47	41	44
Stanford U.	55	58	40	54
U. of Texas, Austin	58	58	67	60
Vanderbilt U.	34	36	48	36
U. of Virginia	40	37	63	39
U. of Washington	42	46	48	38
U. of Wisconsin, Madison	47	48	43	44
Yale U.	65	61	58	62

Note: Ratings are standardized on a scale where 50 represents the average score for all rated departments.
(a) Rating of scholarly quality of faculty members in the program.
(b) Rating of the effectiveness of the program in education of research scholars or scientists.
(c) Rating of improvement in program quality in the last five years.
(d) Rating of the evaluators' familiarity with the work of program faculty.
* Program was initiated after 1970.
n.a. Not available.

English

	Faculty quality (a)	Effective-ness (b)	Improve-ment (c)	Famil-iarity (d)
American U.	36	34	39	39
U. of Arizona	46	48	66	43
Arizona St. U.	43	44	65	43
U. of Arkansas	40	41	56	41
Auburn U.	36	34	50	37
Ball St. U.	38	37	58	58
Boston C.	42	38	50	42
Boston U.	53	48	52	53
Bowling Green St. U.	39	40	58	39
Brandeis U.	49	52	37	46
Brown U.	64	63	57	64
Bryn Mawr C.	41	44	37	40
City U. of New York				
Graduate Sch.	63	59	59	60
U. of California				
Berkeley	71	70	45	70
Davis	51	49	61	52
Irvine	57	57	71	58
Los Angeles	64	63	62	65
Riverside	48	47	41	48
San Diego	56	55	52	55
Santa Barbara	54	50	48	53
Case Western Reserve U.	41	39	34	42
Catholic U.	32	33	32	37
U. of Chicago	68	67	52	68
Claremont Graduate Sch.	50	55	33	45
U. of Colorado	50	52	52	48
Columbia U.	68	64	54	68
U. of Connecticut	47	47	42	45
Cornell U.	67	69	62	67
U. of Delaware	48	47	70	47
U. of Denver	37	37	47	37
Duke U.	57	57	44	52
Emory U.	52	55	53	50
U. of Florida	47	47	57	48
Florida St. U.	39	38	42	38
Fordham U.	42	44	28	39
U. of Georgia	42	43	44	43
Georgia St. U.	31	31	n.a.	37
Harvard U.	69	68	39	72
U. of Illinois	58	59	39	58
Indiana U.	60	62	54	63
U. of Iowa	57	62	51	59
Johns Hopkins U.	67	67	41	68
U. of Kansas	49	50	43	45
Kansas St. U.	37	36	n.a.	38
Kent St. U.	42	39	40	42
U. of Kentucky	49	48	58	50
Lehigh U.	39	42	52	39
Louisiana St. U.	47	47	46	46
Loyola U. of Chicago	39	40	44	41
Marquette U.	42	40	44	43
U. of Maryland	56	56	69	57
U. of Massachusetts	54	55	55	53
U. of Michigan	61	63	45	62
Michigan St. U.	54	54	48	51
U. of Minnesota	52	54	30	48
U. of Mississippi	38	38	42	37
U. of Missouri	46	46	48	41
U. of Nebraska	49	49	39	46
U. of New Mexico	43	44	53	47
New York U.	60	58	63	60
U. of North Carolina	60	60	54	61
U. of North Dakota	33	30	n.a.	34
N. Illinois U.	38	38	45	37
Northwestern U.	60	60	57	61
U. of Notre Dame	44	46	34	47
Ohio U.	40	40	33	38
Ohio St. U.	54	54	42	55
U. of Oklahoma	44	44	52	44
Oklahoma St. U.	34	35	45	37
U. of Oregon	48	48	45	46
U. of Pennsylvania	64	63	70	66
Pennsylvania St. U.	53	55	52	53
U. of Pittsburgh	45	46	45	45
Princeton U.	67	67	50	67
Purdue U.	48	48	45	45
U. of Rhode Island	38	36	n.a.	37
Rice U.	51	51	42	50
U. of Rochester	55	56	48	55
Rutgers U.	62	60	66	64
St. U. of New York				
Binghamton	51	51	50	52
Buffalo	60	58	49	61
Stony Brook	58	58	58	58
Saint Louis U.	46	46	41	48
U. of South Carolina	54	53	61	53
U. of Southern California	55	54	67	58
S. Illinois U., Carbondale	43	41	42	47
Stanford U.	66	68	55	67
Syracuse U.	48	48	43	48
Temple U.	47	45	45	47
U. of Tennessee	49	49	59	46
U. of Texas, Austin	59	50	63	59
Texas A&M U.	42	41	72	40
Texas Tech U.	34	36	52	39
Tufts U.	49	52	44	47
Tulane U.	48	48	38	45
U. of Tulsa	38	37	62	45
U. of Utah	41	42	63	37
Vanderbilt U.	51	52	56	50
U. of Virginia	70	67	63	71
Washington U. (Mo.)	51	53	42	50
U. of Washington	58	59	60	58
Washington St. U.	39	39	48	37
Wayne St. U.	46	46	44	43
U. of Wisconsin				
Madison	60	61	40	60
Milwaukee	52	53	59	52
Yale U.	73	71	48	73

French

	Faculty quality (a)	Effective-ness (b)	Improve-ment (c)	Famil-iarity (d)
U. of Arizona	39	40	52	38
Boston C.	40	40	48	38
Boston U.	36	31	50	36
Brown U.	51	57	54	50
Bryn Mawr C.	49	52	42	48
City U. of New York				
Graduate Sch.	62	60	55	60
U. of California				
Berkeley	61	59	50	62
Davis	53	51	61	49
Irvine	56	55	62	58
Los Angeles	48	50	36	49
Santa Barbara	53	53	56	55
Case Western Reserve U.	33	34	23	38
Catholic U.	34	37	38	34
U. of Chicago	56	56	43	53
U. of Colorado	38	40	41	38
Columbia U.	70	65	51	71
U. of Connecticut	40	42	54	38
Cornell U.	60	63	51	59
Duke U.	56	57	57	56
Emory U.	33	32	33	38
Florida St. U.	32	31	46	32
Fordham U.	42	43	41	44
Harvard U.	56	51	50	64
U. of Illinois	60	59	57	57
Indiana U.	60	63	53	59
U. of Iowa	46	46	60	42
Johns Hopkins U.	49	51	16	61
U. of Kansas	46	48	44	45
U. of Kentucky	49	48	44	54
U. of Maryland	43	41	56	42
U. of Massachusetts	47	47	56	47
U. of Michigan	61	60	50	61
Michigan St. U.	46	45	46	48
U. of Minnesota	47	46	56	44
U. of Missouri	38	37	56	37
U. of Nebraska	32	29	53	38
New York U.	68	66	64	67
U. of North Carolina	54	57	41	58
Northwestern U.	47	48	43	45
Ohio St. U.	50	50	44	50
U. of Oregon	44	42	54	42
U. of Pennsylvania	61	60	57	63
Pennsylvania St. U.	50	53	55	51
U. of Pittsburgh	48	46	50	48
Princeton U.	73	71	71	72
Rice U.	48	51	55	50
Rutgers U.	50	48	66	51
St. U. of New York, Buffalo	53	52	41	51
U. of Southern California	39	35	47	44
Stanford U.	59	61	58	57
U. of Texas, Austin	53	55	50	50
Tulane U.	44	46	51	39
Vanderbilt U.	51	51	48	44
U. of Virginia	62	59	72	63
Washington U. (Mo.)	47	49	41	43
U. of Washington	47	50	53	41
U. of Wisconsin, Madison	56	59	36	56
Yale U.	74	74	53	73

German

	Faculty quality (a)	Effective-ness (b)	Improve-ment (c)	Famil-iarity (d)
Brown U.	51	52	54	51
Bryn Mawr C.	40	38	53	41
City U. of New York				
Graduate Sch.	45	41	41	42
U. of California				
Berkeley	65	64	49	64
Davis	43	44	49	44
Irvine	51	51	53	54
Los Angeles	57	57	58	51
San Diego	40	35	42	42
Santa Barbara	55	51	57	55
U. of Chicago	47	48	33	43
U. of Cincinnati	47	49	46	49
U. of Colorado	36	35	25	40
U. of Connecticut	44	46	49	47
Cornell U.	63	60	74	60
Harvard U.	59	57	38	63

Continued on Following Page

FACT-FILE—Continued

German

Continued

	Faculty quality (a)	Effective-ness (b)	Improve-ment (c)	Famil-iarity (d)
U. of Illinois	57	59	52	52
Indiana U.	65	66	54	64
U. of Iowa	36	35	50	36
Johns Hopkins U.	48	51	41	48
U. of Kansas	41	43	48	41
U. of Massachusetts	57	58	54	59
U. of Michigan	56	57	52	52
U. of Minnesota	51	54	60	52
U. of Nebraska	36	36	49	35
New York U.	47	47	45	43
U. of North Carolina	52	54	53	52
Northwestern U.	54	51	45	56
Ohio St. U.	53	56	49	53
U. of Oregon	45	47	53	41
U. of Pennsylvania	55	55	44	55
Pennsylvania St. U.	43	44	51	43
U. of Pittsburgh	42	39	43	44
Princeton U.	67	66	71	67
Rice U.	39	41	45	40
Rutgers U.	38	40	45	40
St. U. of New York				
Albany	53	50	71	56
Buffalo	48	45	48	47
Stony Brook	38	38	41	38
U. of Southern California	38	41	31	39
Stanford U.	63	64	64	62
U. of Tennessee	31	31	40	32
U. of Texas, Austin	63	65	54	62
Vanderbilt U.	33	36	44	29
U. of Virginia	62	59	74	65
Washington U. (Mo.)	56	56	44	58
U. of Washington	57	57	54	54
U. of Wisconsin, Madison	67	67	62	69
Yale U.	67	68	52	67

Linguistics

	Faculty quality (a)	Effective-ness (b)	Improve-ment (c)	Famil-iarity (d)
U. of Arizona*	50	51	70	53
Brown U.	48	48	56	49
City U. of New York Graduate Sch.*	52	51	48	52
U. of California				
Berkeley	61	58	41	65
Los Angeles	66	65	50	64
San Diego	60	60	53	63
U. of Chicago	62	61	47	59
U. of Connecticut	50	55	60	49
Cornell U.	50	51	53	50
U. of Florida*	32	32	n.a.	30
Georgetown U.	46	49	43	49
Harvard U.	55	54	41	55
U. of Hawaii	52	53	52	47
U. of Illinois	57	60	51	56
Indiana U.	48	49	34	55
U. of Kansas	42	43	52	38
Massachusetts Institute of Technology	69	67	44	67
U. of Massachusetts	60	64	65	59
U. of Michigan	48	49	33	50
U. of Minnesota	44	41	51	46
New York U.	43	43	59	43
U. of North Carolina	32	32	27	34
Northern Illinois U.	24	24	n.a.	27
Northwestern U.	41	42	50	37
Ohio St. U.	57	58	47	57
U. of Pennsylvania	61	57	56	58
U. of Pittsburgh	41	38	51	39
U. of Rochester	36	34	32	32
St. U. of New York, Buffalo	43	43	41	47
U. of Southern California	52	52	69	52
Stanford U.	58	59	61	59
U. of Texas, Austin	63	61	56	60
U. of Washington	51	53	57	55
U. of Wisconsin, Madison	45	44	54	44
Yale U.	52	46	46	53

Music

	Faculty quality (a)	Effective-ness (b)	Improve-ment (c)	Famil-iarity (d)
Ball St. U.*	39	40	57	39
Boston U.	46	43	52	44
Brandeis U.	58	56	39	51
City U. of New York Graduate Sch.	62	59	55	58
U. of California				
Berkeley	67	69	57	63
Los Angeles	60	60	54	62
San Diego*	41	42	51	39
Santa Barbara	48	48	62	49
Case Western Reserve U.	41	42	43	44
Catholic U.	42	41	43	45
U. of Chicago	67	68	49	58
U. of Cincinnati	43	43	47	41
U. of Colorado	42	42	47	40
Columbia U.	61	63	40	57
Cornell U.	62	64	50	58
Florida St. U.	47	49	65	49
U. of Illinois	63	62	53	67
Indiana U.	59	58	51	66
U. of Iowa	52	54	47	53
Johns Hopkins U. Peabody Inst.	44	44	50	40
Juilliard Sch.	51	45	44	58
U. of Kansas	45	43	53	44
U. of Kentucky	41	40	43	44
Louisiana St. U.	30	32	n.a.	32
U. of Maryland	48	49	57	51
U. of Miami	36	37	n.a.	38
U. of Michigan	62	62	50	65
Michigan St. U.	40	44	28	40
U. of Minnesota	48	48	55	40
U. of Missouri Kansas City	34	36	47	37
New York U.	60	60	42	57
U. of North Carolina	60	60	61	57
North Texas St. U.	50	51	60	57
Northwestern U.	52	51	57	55
Ohio St. U.	51	51	44	52
U. of Oklahoma	36	39	44	38
U. of Oregon	43	42	54	38
U. of Pennsylvania	62	61	73	62
U. of Pittsburgh	43	44	43	41
Princeton U.	67	68	30	66
U. of Rochester	58	58	80	61
Rutgers U.	53	52	39	50
St. U. of New York, Buffalo	53	48	46	51
U. of Southern California	52	52	59	49
Southwestern Baptist Theological Seminary	27	25	n.a.	27
Stanford U.	59	61	46	57
U. of Texas, Austin	54	52	55	59
Washington U. (Mo.)	40	40	30	37
U. of Washington	50	49	60	48
Wesleyan U.	49	49	34	43
West Virginia U.	39	39	60	37
U. of Wisconsin, Madison	48	46	42	55
Yale U.	66	67	50	68

Philosophy

	Faculty quality (a)	Effective-ness (b)	Improve-ment (c)	Famil-iarity (d)
U. of Arizona	61	55	71	63
Boston C.	40	47	45	33
Boston U.	56	56	56	62
Brown U.	60	62	48	63
Bryn Mawr C.	40	41	44	40
City U. of New York Graduate Sch.	56	50	54	58
U. of California				
Berkeley	69	65	38	66
Irvine	55	57	68	57
Los Angeles	68	66	55	65
Riverside*	38	36	44	44
San Diego	50	52	52	50
Santa Barbara	47	46	52	48
Catholic U.	49	52	53	46
U. of Chicago	67	63	64	67
U. of Cincinnati	43	39	53	40
Claremont Graduate Sch.	45	46	50	43
U. of Colorado	44	43	45	41
Columbia U.	60	59	38	61
U. of Connecticut	42	42	51	43
Cornell U.	62	63	40	63
DePaul U.	36	35	n.a.	32
Duke U.	46	43	47	45
Emory U.	41	40	45	44
Florida St. U.	46	44	78	48
Fordham U.	47	49	53	39
Georgetown U.	45	48	55	44
U. of Georgia*	36	35	49	38
Harvard U.	72	70	37	70
U. of Hawaii	41	42	52	41
U. of Illinois				
Urbana-Champaign	51	52	40	50
Chicago Circle	58	58	63	57
Indiana U.	58	59	51	58
U. of Iowa	47	51	35	45
Johns Hopkins U.	52	64	32	56
U. of Kansas	42	45	52	39
Marquette U.	40	43	50	33
Massachusetts Inst. of Tech.	64	63	58	62
U. of Massachusetts	60	62	53	60
U. of Miami	41	38	58	43
U. of Michigan	65	64	33	63
Michigan St. U.	43	44	41	41
U. of Minnesota	55	57	44	53
U. of Missouri	33	33	45	35
U. of Nebraska	42	44	58	45
New School for Social Research	30	32	22	41
U. of North Carolina	56	59	49	57
Northwestern U.	50	49	50	54
U. of Notre Dame	52	55	55	54
Ohio St. U.	52	56	51	52
U. of Oklahoma	38	35	57	38
U. of Oregon	37	35	42	37
U. of Pennsylvania	52	52	39	53
Pennsylvania St. U.	47	48	47	45
U. of Pittsburgh				
Philosophy	71	72	53	67
History and philosophy of science*	68	66	58	66
Princeton U.	71	73	48	68
Purdue U.	42	40	46	43
Rice U.	45	40	70	52
U. of Rochester	52	53	31	55
Rutgers U.	49	47	54	49
St. U. of New York, Buffalo	47	47	47	45
Saint Louis U.	44	46	45	37
U. of Southern California	56	55	75	54
U. of S. Illinois, Carbondale	34	33	47	36
Stanford U.	66	65	54	63
Syracuse U.	54	53	75	57
Temple U.	50	50	50	54
U. of Tennessee	35	34	54	36
U. of Texas, Austin	55	56	46	57
Tulane U.	39	44	42	41
Vanderbilt U.	46	49	49	46
U. of Virginia	44	45	49	43
Washington U. (Mo.)	49	49	43	50
U. of Washington	49	48	51	47
Wayne St. U.	42	41	37	44
U. of Wisconsin, Madison	57	56	50	55
Yale U.	57	55	45	64

Spanish

	Faculty quality (a)	Effective-ness (b)	Improve-ment (c)	Famil-iarity (d)
U. of Arizona	50	53	57	52
Arizona St. U.	45	44	64	46
Brown U.	60	61	50	56
City U. of New York Graduate Sch.	52	48	39	51
U. of California				
Berkeley	67	68	46	64
Davis	47	46	52	43
Irvine	55	57	61	59
Los Angeles	63	63	62	60
Riverside	48	46	47	49
San Diego	62	56	40	60
Santa Barbara	53	53	66	49
Catholic U.	42	44	42	43
U. of Cincinnati	39	39	45	48
U. of Colorado	39	39	43	37
Columbia U.	60	56	48	61
U. of Connecticut	45	45	61	48
Cornell U.	60	61	55	54
Duke U.	56	56	49	56
Emory U.	31	29	32	36
U. of Florida	39	40	34	40
Florida St. U.	37	37	41	39
Georgetown U.	42	43	44	36
U. of Georgia	46	47	63	48
Harvard U.	74	68	58	73
U. of Illinois	59	62	42	60
Indiana U.	61	61	50	62
U. of Iowa	46	48	47	45
Johns Hopkins U.	47	48	18	52
U. of Kansas	61	65	63	62
U. of Kentucky	56	58	56	61
Louisiana St. U.	38	40	66	36
U. of Maryland	53	48	61	52
U. of Massachusetts	47	50	49	47
U. of Miami	40	38	43	47
U. of Michigan	65	63	51	64
Michigan St. U.	45	46	48	49
U. of Minnesota	55	58	63	57
U. of Missouri	44	46	53	40
U. of Nebraska	41	39	60	46
U. of New Mexico	49	52	50	48
New York U.	50	51	51	47
U. of North Carolina	55	56	45	59
Northwestern U.	42	43	43	43
Ohio St. U.	41	43	32	35
U. of Oklahoma	31	28	40	30
U. of Oregon	36	36	34	31
U. of Pennsylvania	72	71	57	66
Pennsylvania St. U.	51	53	56	53
U. of Pittsburgh	57	57	46	58
Princeton U.	59	59	38	58
U. of Puerto Rico	45	45	60	31
Purdue U.	42	39	49	44
Rutgers U.	48	50	49	48
St. U. of New York				
Albany	52	44	60	50
Buffalo	53	54	57	53
U. of Southern California	42	46	45	45
Stanford U.	63	63	55	60
Syracuse U.	43	40	52	45
Temple U.*	36	41	46	32
U. of Tennessee	35	32	42	36
Texas Tech U.*	40	38	67	45
U. of Texas, Austin	69	68	52	67
Tulane U.	43	43	47	45
Vanderbilt U.	48	48	51	46
U. of Virginia	53	55	74	52
Washington U. (Mo.)	41	43	40	52
U. of Washington	52	53	46	50
U. of Wisconsin, Madison	63	65	38	66
Yale U.	68	65	54	70

Note: Ratings are standardized on a scale where 50 represents the average score for all rated departments.
(a) Rating of scholarly quality of faculty members in the program.
(b) Rating of the effectiveness of the program in education of research scholars or scientists.
(c) Rating of improvement in program quality in the last five years.
(d) Rating of the evaluators' familiarity with the work of program faculty.
* Program was initiated after 1970.
n.a. Not available.

SOURCE: CONFERENCE BOARD OF ASSOCIATED RESEARCH COUNCILS

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News Summary

Articles on inside pages

Student cartoonists skewer subjects ranging from the campus police to the Ayatollah Khomeini. Story on Page 6.

Enrollment of full-time-equivalent students in 1981-82 went up by 1.6 per cent over the previous year, according to the latest Chronicle Survey. Story on Page 10.

The Louisiana board of regents has approved a new doctoral program in computer science at Louisiana State University—the second in the state—and a controversy has erupted. Story on Page 11.

Student-loan defaults decreased in 1980-81, the Department of Education reports, but criticism of federal loan programs continues. Story on Page 13.

Lightweight football—for student athletes under 158 pounds—is lightweight only in contrast to its varsity counterpart. Story on Page 15.

Jacques Barzun, a historian and "diagnostician of culture," believes the condition of arts and letters today is critical. Story on Page 23.

With the end of the year approaching, academics should begin to consider what they can do to minimize their 1982 tax bill. Story on Page 27.

The United States will be represented in the International Institute for Applied Systems Analysis by the American Academy of Arts and Sciences. Story on Page 19.

Polish students took part in brief protests last week, but massive demonstrations called by the trade union Solidarity failed to materialize. Story on Page 19.

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Colleges Feel Increasing Pressure to Produce 'Work-Ready' People

By BEVERLY T. WATKINS

Colleges and universities are coming under increasing pressure to establish partnerships with business to make sure their students receive an education that more nearly matches the present and future needs of the nation's work force.

Corporate executives—as well as some public officials and educators—are concerned that people are leaving college today with an education that is increasingly unsuited to management's needs. Many college programs, they say, concentrate too heavily on skills and not enough on problem-solving abilities.

Graduates, especially those who will someday hold top-level corporate jobs, must be educated more broadly, to enable them to analyze complex economic and technological problems and reach sound decisions, the executives say.

"We need to vastly improve our output of highly developed human capital," William C. Norris, chairman and chief executive officer of Control Data Corporation, told college presidents at a meeting this month of the American Association of State Colleges and Universities.

He called for "increased cooperation between businessmen and academics to determine what needs to be taught. We need more emphasis on technological literacy and on problem solving. We have to help graduates accommodate to business's need for analytical skills."

"Striking up a partnership is the first order of business, for without it colleges and universities cannot gain a thorough understanding of how they can best respond to industry's needs for human

Continued on Page 8, Column 1

CONTROL DATA CORPORATION

Control Data's William C. Norris

40 Pct. of Students in Survey Say They Worry About Finances

Stress in studies, group living, and social life disclosed

By ZOË INGALLS

CAMBRIDGE, MASS.

Worry about finances was the problem cited most often by college students in a study of stress and related problems among students at 16 colleges and universities in Massachusetts. More than 40 per cent of the students reported that lack of money was a problem for them.

The results of the study, which examined the sources, nature, and scope of stress in the areas of academics, group living arrangments, and social life, were released here by the Medical Foundation of Boston, a nonprofit organization that conducts research in the fields of physical and mental health. The nearly 3,400 students surveyed were also questioned about their health, psychological adjustment, and alcohol and drug use.

"The financial problem area is significant, because the study was done in the previous academic year [spring of 1981], when cutbacks in student aid were not as pronounced," said Henry Wechsler, the foundation's director of research, who conducted the study along with Mary Rohman and Roberta K. Idelson, research associates.

"I would imagine the problems are much more severe for students today," he said.

Continued on Page 8, Column 1

Medical Schools Fear U.S. Cuts Will Hurt Blacks

Even now, they represent just 5.8 pct. of enrollment

By KIM McDONALD

WASHINGTON

The reduction in federal funds for educating health professionals is likely to decrease the already shrinking proportion of black medical students, educators said here last week.

Affirmative-action programs increased the percentage of black students at medical schools from 2.7 in 1968 to 7.5 in 1975. But the proportion of black medical students has declined almost every year since, Mary K. Schleiter, a research associate at the University of Chicago's medical school, told the annual meeting of the Association of American Medical Colleges.

Ms. Schleiter said 5.8 per cent of this year's medical students are black and that reductions in federal loans could reduce the proportion to "pre-1970 levels."

Further Reductions Seen

David Satcher, president of Meharry Medical College, said federal aid was critical to the students at his traditionally black medical institution. Half of Meharry's students come from families with incomes of less than $15,000 per year.

Although everyone agrees that there will be no surplus of minority-group physicians, he added, recent projections that the country will have a surplus of physicians by 1990 may lead to further reductions in the proportion of medical students who are black.

Ms. Schleiter said only 3 per cent of the physicians in the country are black, even though blacks constitute 12 per cent of the population.

"To bring the proportion of blacks in medicine up to the level of other Americans by the year 2000, more than four times the 1,000 blacks currently entering medical school each year would be required, beginning in September, 1982," she said. "Clearly, a change that drastic is not occurring."

Thomas E. Norris, associate dean for academic affairs at the Morehouse School

Continued on Page 12, Column 1

Dewey's Decimals for Personal Libraries

Finding a particular book in the home or office library of the typical professor often turns into a frustrating search. There is a practical alternative: the system of classification created by Melvil Dewey in 1876 and still widely used today.

See the "Personal & Professional" section, beginning on Page 27.

CHRONICLE SURVEY

Enrollment of Full-Time-Equivalent Students

Changes from 1980-81 to 1981-82, shown by national sampling of 300 colleges and universities

	Undergraduate—lower division					Undergraduate—upper division					Undergraduate—total				
	Average F.T.E. enrollment 1981-82 (a)	Change from 1980-81 (b)	1-year change at individual institutions			Average F.T.E. enrollment 1981-82 (a)	Change from 1980-81 (b)	1-year change at individual institutions			Average F.T.E. enrollment 1981-82 (a)	Change from 1980-81 (b)	1-year change at individual institutions		
			Average (c)	High (d)	Low (e)			Average (c)	High (d)	Low (e)			Average (c)	High (d)	Low (e)
Public institutions															
Research and Ph.D.-granting universities	8,806	+ 1.0%	+ 1.7%	+ 5.5%	− 2.1%	6,826	+ 3.1%	+ 3.1%	+ 6.8%	− 0.6%	15,632	+ 1.9%	+ 1.5%	+ 4.2%	− 1.1%
Comprehensive colleges and universities	4,153	+ 0.9%	+ 1.3%	+ 4.9%	− 2.3%	3,554	+ 1.3%	+1.0%	+ 3.6%	− 1.5%	7,708	+ 1.1%	+ 1.5%	+ 4.2%	− 1.3%
2-year colleges	3,763	+ 3.6%	+ 1.8%	+ 6.0%	− 2.3%	—	—	—	—	—	3,763	+ 3.6%	+ 1.8%	+ 6.0%	− 2.3%
All	**5,269**	**+ 1.8%**	**+ 1.7%**	**+ 5.6%**	**− 2.3%**	**5,681**	**+ 2.7%**	**+ 1.6%**	**+ 4.4%**	**− 1.3%**	**8,148**	**+ 2.0%**	**+ 1.7%**	**+ 5.4%**	**− 1.9%**
Private institutions															
Research and Ph.D.-granting universities	3,380	+ 2.4%	+ 2.1%	+ 4.0%	+ 0.3%	2,333	+ 1.4%	+ 1.1%	+ 2.9%	− 0.6%	5,714	+ 2.0%	+ 1.7%	+ 3.3%	+ 0.2%
Comprehensive colleges and universities	1,900	+ 1.8%	+ 0.9%	+ 5.4%	− 3.6%	1,186	− 0.4%	− 0.7%	+ 4.1%	− 5.5%	2,910	+ 1.0%	+ 0.8%	+ 4.7%	− 3.2%
Liberal-arts colleges															
Selective	1,288	+ 1.6%	+ 1.2%	+ 5.3%	− 3.0%	789	− 2.9%	+ 1.6%	+10.5%	− 7.3%	2,040	+ 0.9%	+ 1.9%	+ 5.3%	− 1.6%
Less selective	696	− 1.2%	− 2.1%	+ 3.6%	− 7.8%	352	− 1.8%	+ 4.2%	+13.9%	− 5.5%	1,229	+ 5.6%	+ 3.2%	+ 6.0%	+ 0.5%
2-year colleges	443	+ 1.1%	+ 1.4%	+ 8.6%	− 5.9%	—	—	—	—	—	443	+ 1.1%	+ 1.4%	+ 8.2%	− 5.5%
All	**1,952**	**+ 1.9%**	**+ 0.6%**	**+ 4.1%**	**− 3.0%**	**1,274**	**+ 0.5%**	**+ 1.4%**	**+ 6.3%**	**− 3.6%**	**3,219**	**+ 2.0%**	**+ 1.7%**	**+ 4.3%**	**+ 0.8%**
Public and private institutions combined	**4,552**	**+ 1.8%**	**+ 1.1%**	**+ 4.9%**	**− 2.6%**	**4,729**	**+ 2.5%**	**+ 1.5%**	**+ 5.4%**	**− 2.5%**	**7,083**	**+ 2.0%**	**+ 1.7%**	**+ 4.8%**	**− 1.4%**

	Graduate and professional				
	Average F.T.E. enrollment 1981-82 (a)	Change from 1980-81 (b)	1-year change at individual institutions		
			Average (c)	High (d)	Low (e)
Public institutions					
Research and Ph.D.-granting universities					
Graduate	2,995	− 2.8%	− 1.8%	+ 3.2%	− 6.9%
Professional	1,299	+ 2.6%	+ 1.5%	+ 5.9%	− 3.0%
Comprehensive colleges and universities					
Graduate	776	− 2.9%	− 1.0%	+ 8.6%	−10.7%
Private institutions					
Research and Ph.D.-granting universities					
Graduate	1,532	− 0.1%	− 1.7%	+ 1.8%	− 5.2%
Professional	1,061	+ 7.2%	+16.4%	+40.9%	− 8.1%
Comprehensive colleges and universities					
Graduate	388	+ 1.5%	− 5.1%	+ 3.7%	−13.8%
Professional	491	− 2.3%	− 1.7%	+ 1.5%	− 5.0%

	All students				
	Average F.T.E. enrollment 1981-82 (a)	Change from 1980-81 (b)	1-year change at individual institutions		
			Average (c)	High (d)	Low (e)
Public institutions					
Research and Ph.D.-granting universities	19,926	+ 1.2%	+ 1.2%	+ 3.9%	− 1.6%
Comprehensive colleges and universities	8,491	+ 0.8%	+ 1.1%	+ 3.8%	− 1.6%
2-year colleges	3,764	+ 3.6%	+ 1.8%	+ 6.0%	− 2.3%
All	**9,555**	**+ 1.5%**	**+ 1.6%**	**+ 5.2%**	**− 2.0%**
Private institutions					
Research and Ph.D.-granting universities	8,155	+ 2.2%	+ 2.2%	+ 4.2%	+ 0.2%
Comprehensive colleges and universities	3,188	+ 0.9%	+ 0.5%	+ 4.9%	− 3.9%
Liberal-arts colleges					
Selective	2,061	+ 0.7%	+ 1.7%	+ 5.7%	− 2.3%
Less selective	1,231	+ 5.6%	+ 3.3%	+ 7.1%	− 0.5%
2-year colleges	443	+ 1.1%	+ 1.4%	+ 8.8%	− 6.0%
All	**4,138**	**+ 2.1%**	**+ 1.8%**	**+ 4.9%**	**− 1.3%**
Public and private combined	**8,385**	**+ 1.6%**	**+ 1.7%**	**+ 5.1%**	**− 1.7%**

(a) Full-time-equivalent enrollment is based on the number of credit hours taken by students in each category, divided by 30 for undergraduates or by 24 for graduate and professional students. Averages that combine types of student or types of institution are weighted according to enrollment of each type.

(b) Percentage change in aggregate F.T.E. enrollment for each category in 1981-82 compared with 1980-81.

(c) Average of the percentage changes reported by the institutions in each category.

(d) About one-fifth of the institutions reported gains larger than the "high" percentage (mean per cent of change plus one mean deviation).

(e) About one-fifth of the institutions reported smaller gains or greater losses than the "low" percentage (mean per cent of change minus one mean deviation).

Note: Survey data are based on a stratified random sample of 150 public and 150 private colleges and universities. Technical inquiries about the survey design and sampling techniques should be addressed to John Minter Associates, P.O. Box 107, Boulder, Colo. 80306.

SOURCE: SURVEY FOR THE CHRONICLE BY JOHN MINTER ASSOCIATES

Full-Time-Equivalent Enrollment Rose 1.6 Pct., Survey Finds

By JACK MAGARRELL

Enrollment continued to grow at America's colleges and universities last year, with an increase of 1.6 per cent in the number of full-time-equivalent students during 1981-82, the Chronicle Survey has found.

The National Center for Education Statistics reported earlier that the number of college students—both part time and full time—was up by 2.3 per cent in the fall of 1981. But full-time-equivalent enrollment is a more accurate measure—especially now, when the proportion of part-time students is increasing. With fewer people graduating from high school, colleges have been recruiting more students from among people who are older, unable to afford full-time study, or who have to combine their studies with part-time or full-time jobs.

In many states, appropriations for public institutions are tied to the number of full-time-equivalent students. The fees paid by students at both public and private colleges often are based on the number of credit hours for which they enroll.

The Chronicle Survey, based on data from a representative, national sample of 300 institutions, compared last year's enrollment with the previous year's by counting total credit hours for which students were enrolled.

The survey divided the total number of undergraduate semester hours by 30—or quarter hours by 45—to come up with the number of full-time-equivalent students. At the graduate and professional level, 24 semester hours or 36 quarter hours per year were counted as the equivalent of one full-time student.

Using that definition of full-time-equivalent enrollment, the survey found enrollment up 1.5 per cent at public institutions and up 2.1 per cent at private institutions.

The number of full-time-equivalent students increased by only 0.7 per cent at selective private liberal-arts colleges, but it rose 5.6 per cent at the less selective ones, according to the survey.

The selective institutions tend to limit their enrollment to a total that changes little from year to year.

Among public institutions, community colleges showed the largest growth in enrollment of full-time-equivalent students, up 3.6 per cent compared with the previous year.

Public comprehensive colleges and universities—institutions with 1,500 students or more, a liberal-arts program, and at least one professional program—gained only 0.8 per cent.

The Chronicle Survey indicated that about a fifth of the colleges and universities had gained more than 5 per cent in enrollment of full-time-equivalent students in 1981-82, while an equal proportion of the institutions had lost 1.7 per cent or more. The average institution gained about 1.7 per cent.

The survey was designed and conducted for *The Chronicle* by John Minter Associates of Boulder, Colo.

A similar survey a year ago found that overall enrollment of full-time-equivalent students in 1980-81 had gone up 3.5 per cent over the previous year.

The 1981-82 survey found that enrollment of full-time-equivalent students in the first and second years of undergraduate study had increased 1.1 per cent. Among students in their third or fourth years, the increase was 2.5 per cent.

At the graduate level, enrollment of full-time-equivalent students showed a decline of 1.8 per cent at public universities and a decrease of 0.1 per cent at private universities, according to the survey.

Enrollment in professional programs increased 2.6 per cent at public universities and 7.2 per cent at private universities.

Fewer Cal. Students Taking More Credits

LONG BEACH, CAL.

The California State University system reported last week that the total number of students on its 20 campuses had dropped this fall by 4,060, or 1.3 per cent, compared with last year, but that the number of full-time-equivalent students had shown virtually no decline.

On the campus of California State University at Los Angeles, the total number of students—the "head-count" enrollment—declined this fall by 2.4 per cent. But the number of full-time-equivalent students rose 0.1 per cent.

William A. Taylor, an associate vice-president at Los Angeles, said the figures showed that students generally were registering for more credit hours. Because of the economic recession, he said, many part-time students may be working less and studying more. Some, he added, may be trying to save money by accelerating their college education.

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News Summary

Articles on inside pages

As one of four historically black colleges in the country that now have more white students than black, Kentucky State University is intent on preserving its black heritage. Story on Page 5.

The bachelor's degree doesn't mean anything anymore, participants in a recent conference agreed. Story on Page 8.

Government monitoring of research in genetic engineering is needed, a Presidential commission has concluded. Story on Page 9.

Edward A. Knapp, new director of the National Science Foundation, wants to improve basic research at universities. Story on Page 9.

The Administration may drop a controversial proposal that would bar graduate students from Guaranteed Student Loans. Story on Page 12.

Temple University has given up its legal fight to prove that Title IX does not apply to its athletic programs. Story on Page 13.

New rules designed to add to the excitement of college basketball will be tested by several major conferences this season. Story on Page 13.

College guides for women and for black students evaluate, among other things, day-care services and race relations on campuses. Stories on Page 21.

The Israeli government has been criticized for its treatment of foreign faculty members at universities on the West Bank who refuse to disavow support for the P.L.O. Story on Page 15.

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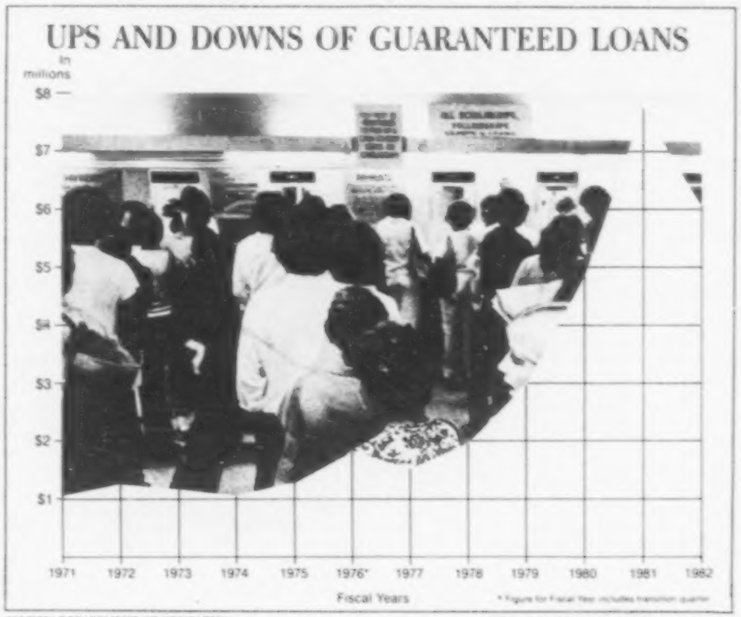


SOURCE: DEPARTMENT OF EDUCATION CHRONICLE CHART BY PETER H. STAFFORD

Drop in Students' Borrowing Tied to Tighter Standards

By JANET HOOK

WASHINGTON

About 780,000 fewer federally guaranteed student loans have been made in the year since tighter eligibility standards were imposed, according to the Education Department.

Noting that college enrollments were expected to increase slightly in 1982-83 despite the drop in the number of Guaranteed Student Loans, the department said the Reagan Administration was succeeding in "eliminating waste and abuse in the loan program" without denying students access to college. More recent statistics show, however, that enrollments dropped slightly this year (see story below).

The decline in the number of guaranteed loans made in fiscal 1982—the year, ending this past September 30, in which most loans for the current academic year were made—represents a 22-per-cent drop from the previous year. At the same time, the amount of

Continued on Page 12, Column 1

40,962 Fewer Students Enrolled at Private Institutions This Fall

Early data show 27,506 more students at public colleges

By JACK MAGARRELL

Public colleges and universities gained slightly in total enrollment this fall and private institutions lost substantially, according to preliminary data from the National Center for Education Statistics.

The federal agency estimated last week that 40,962 fewer students had enrolled at private colleges and universities than a year ago. At the same time, 27,506 more students enrolled at public institutions.

That is a net loss of 13,456 students for all of higher education—a decline of 0.1 per cent to an estimated total of 12,358,216. If the preliminary count holds up, it will be the third time in seven years that total college enrollment failed to increase.

Total enrollment declined 0.2 per cent in the fall of 1978 and 1.5 per cent in the fall of 1976. Last year, it rose 2.3 per cent.

The preliminary enrollment figures from N.C.E.S. are based on a survey of more than 1,300 of the country's 3,200 higher-education institutions.

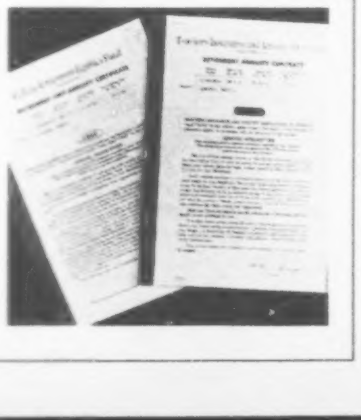
The N.C.E.S. data for private colleges and universities include those for propri-

Continued on Page 7, Column 1

Mutual Funds Take On TIAA-CREF

Academic employees at a small but growing number of colleges and universities are becoming disenchanted with the retirement plans offered by T.I.A.A. and C.R.E.F. Those plans are beginning to face competition from mutual funds.

See the "Personal & Professional" section, beginning on Page 17



Tenure Panelists Told They Must Disclose Votes

But appeals court backs 'qualified' confidentiality

By SUZANNE PERRY

Two members of a committee that denied tenure and reappointment to a black instructor at Fiorello H. La Guardia Community College can be compelled to reveal their votes, the U. S. Court of Appeals for the Second Circuit ruled last week.

But the court, calling for a balance between academic freedom and individual rights, said its decision was based on the specific circumstances of the case. The "routine" disclosure of tenure votes in court, it said, "could chill frank discussion and engender disharmony among faculty."

Lawyers involved in the case said that recognition of a "qualified privilege" of confidentiality in tenure votes was a significant and welcome departure from the ruling in a case involving James A. Dinnan, a University of Georgia professor who went to jail rather than reveal his vote on a tenure matter. A federal appeals court a year ago upheld Mr. Dinnan's contempt-of-court citation, saying society had no strong interest in extending a legal secret-ballot privilege to tenure votes.

Excerpts from the federal appeals court's ruling on confidentiality of tenure votes appear on Pages 18 and 19.

In the La Guardia case, the appeals court said the votes should be disclosed because the committee had refused to tell the plaintiff, S. Simpson Gray, why it had denied him tenure. Mr. Gray taught in the accounting and managerial studies department at La Guardia for five years before he was denied reappointment for the 1979-80 academic year.

He is seeking information on the votes in connection with a race-discrimination suit he has filed as a result of that decision.

Because the committee offered no explanation of its decision, the appeals court said, Mr. Gray is forced to "chase an invisible quarry" in his effort to prove employment discrimination. "Academic free-

Continued on page 18, Column 3

Guaranteed Student Loans, by State: the Changes from 1980-81 to 1981-82

	Number of loans			Amount of loans		
	1980-81	1981-82	Change	1980-81	1981-82	Change
Alabama	28,901	22,345	−22.7%	$ 64,711,261	$ 45,717,411	−29.4%
Alaska	2,471	433	−82.5%	5,097,888	1,077,593	−78.9%
Arizona	32,137	31,883	− 0.8%	66,760,378	72,364,059	+ 8.4%
Arkansas	14,041	11,727	−16.5%	27,789,253	22,349,003	−19.6%
California	250,169	208,047	−16.8%	664,322,502	583,718,595	−12.1%
Colorado	45,410	29,105	−35.9%	115,425,502	74,211,544	−35.7%
Connecticut	110,628	66,900	−39.5%	254,364,739	158,129,191	−37.8%
Delaware	12,018	6,826	−43.2%	24,913,598	15,794,154	−36.6%
District of Columbia	19,212	13,759	−28.4%	54,980,589	36,963,444	−32.8%
Florida	60,960	66,945	+ 9.8%	156,489,010	164,504,997	+ 5.1%
Georgia	35,309	25,195	−28.7%	74,716,807	50,364,806	−32.6%
Hawaii	10,624	7,546	−29.0%	26,436,359	17,488,974	−33.9%
Idaho	8,617	8,939	+ 3.7%	17,539,407	18,574,418	+ 5.9%
Illinois	211,504	145,369	−31.3%	488,801,174	324,825,245	−33.6%
Indiana	78,589	56,981	−27.5%	148,359,541	118,758,136	−20.0%
Iowa	69,934	51,051	−27.0%	141,611,498	100,623,343	−29.0%
Kansas	51,707	42,766	−17.3%	116,760,845	97,676,534	−16.4%
Kentucky	41,554	31,437	−24.4%	82,146,141	63,737,760	−22.4%
Louisiana	24,386	28,553	+17.1%	52,269,432	57,125,411	+ 9.3%
Maine	25,489	21,877	−14.2%	50,150,861	43,276,653	−13.7%
Maryland	66,381	50,841	−23.4%	121,401,125	97,148,127	−20.0%
Massachusetts	177,107	123,558	−30.2%	386,201,826	302,689,307	−21.6%
Michigan	130,503	95,114	−27.1%	279,941,681	203,735,109	−27.2%
Minnesota	108,727	88,784	−18.4%	226,598,002	197,365,990	−12.9%
Mississippi	14,131	12,544	−11.2%	29,601,609	27,702,114	− 6.4%
Missouri	59,730	46,549	−22.1%	133,348,674	105,339,861	−21.0%
Montana	11,264	9,701	−13.9%	18,810,018	16,459,782	−12.5%
Nebraska	39,371	26,128	−33.6%	91,072,827	59,049,874	−35.2%
Nevada	6,198	5,316	−14.2%	11,446,300	10,290,885	−10.1%
New Hampshire	21,421	14,550	−32.1%	45,655,505	33,210,133	−27.3%
New Jersey	165,823	108,304	−34.7%	397,813,207	251,728,130	−36.7%
New Mexico	17,923	16,720	− 6.7%	16,461,728	17,610,085	+ 7.0%
New York	534,053	433,214	−18.9%	1,166,964,650	965,262,057	−17.3%
North Carolina	29,780	16,301	−45.3%	55,042,793	35,130,741	−36.2%
North Dakota	18,539	13,981	−24.6%	32,950,332	25,354,406	−23.1%
Ohio	128,375	97,197	−24.3%	316,585,173	230,260,843	−27.3%
Oklahoma	21,709	17,577	−19.0%	38,752,068	32,368,554	−16.5%
Oregon	27,613	30,158	+ 9.2%	52,150,436	65,364,958	+25.3%
Pennsylvania	273,180	234,170	−14.3%	604,793,786	506,534,717	−16.3%
Rhode Island	20,360	17,669	−13.2%	44,376,166	40,978,357	− 7.7%
South Carolina	7,630	7,125	− 6.6%	9,354,391	9,939,853	+ 6.3%
South Dakota	28,075	21,416	−23.7%	57,004,844	44,309,098	−22.3%
Tennessee	32,947	25,352	−23.1%	81,127,855	60,218,764	−25.8%
Texas	71,013	56,734	−20.1%	165,179,193	131,779,650	−20.2%
Utah	40,825	16,761	−59.0%	42,217,027	33,778,085	−20.0%
Vermont	12,633	10,284	−18.6%	25,341,410	21,444,629	−15.4%
Virginia	71,259	43,853	−38.5%	166,513,230	104,467,054	−37.3%
Washington	24,175	26,535	+ 9.8%	58,900,585	65,993,423	+12.0%
West Virginia	18,552	16,268	−12.3%	40,792,749	36,099,379	−11.5%
Wisconsin	119,876	72,574	−39.5%	246,875,907	154,869,259	−37.3%
Wyoming	4,658	2,301	−48.9%	10,908,858	5,585,625	−48.8%
Pacific Islands	71	145	+104.2%	139,684	368,598	+163.9%
Puerto Rico	6,263	7,659	+22.3%	14,046,089	17,682,475	+25.9%
Virgin Islands	729	831	+14.0%	1,700,130	1,971,494	+16.0%
United Student Aid Funds †	84,042	107,504	+27.9%	170,009,114	121,100,218	−28.8%
Total	**3,528,596**	**2,751,464**	**−22.0%**	**$7,793,805,757**	**$6,100,472,905**	**−21.7%**

† Private agency that guarantees loans in 12 states

SOURCE: U.S. DEPARTMENT OF EDUCATION

White House May Give Up Plan to Bar Graduate-Student Loans

WASHINGTON

The Reagan Administration is considering dropping its controversial proposals to bar graduate students from receiving Guaranteed Student Loans and to require them to borrow under a more expensive loan program, Administration sources say.

In place of those proposals, the Education Department has recommended another plan for the coming fiscal year that would require graduate students to pay more interest on their loans than they now do.

The department's plan was included in budget recommendations for fiscal 1984, which begins next October 1, that were submitted to the Office of Management and Budget.

Submission of the proposals to the O.M.B. is one of the earliest stages of negotiation among officials in the department, White House, and budget office as the Administration prepares its fiscal 1984 spending plan, which will be officially released in January.

The Education Department's recommendations were being reviewed by the O.M.B. last week. Sources said the budget office might propose major changes in the agency's student-aid proposals.

No Details Disclosed

In statements later confirmed by a department spokesman, Education Secretary Terrel H. Bell was recently quoted as saying that reductions in his department's budget would probably fall more heavily on higher-education programs than on aid to elementary and secondary schools, and that additional reforms were needed in the guaranteed-loan program. But the Secretary and Tony Blankley, the department spokesman, refused to disclose the details of the department's proposals.

In its budget for fiscal 1983, the Administration proposed barring graduate students from receiving Guaranteed Student Loans—federally subsidized loans on which no interest is charged to students while they are still in college, and which borrowers later repay at 9-per-cent interest. The Administration proposed allowing graduate students to borrow only under an auxiliary federal loan program, which requires them to pay 12-per-cent interest. Interest on auxiliary loans—which was reduced only recently from 14 per cent—is charged to students even while they are in college or graduate school.

Congress has approved none of the Administration's loan proposals for fiscal 1983, and the recommendations for graduate students faced particularly stiff opposition.

In an apparent effort to make its loan blueprint more acceptable to Congress, the Education Department has recommended another plan to reduce federal subsidies for graduate students, sources said. Such students would be able to receive the 9-per-cent student loans under the agency's new proposal, but the interest would be charged while they are still in graduate school.

Officials have indicated that in other areas the department's recommendations for fiscal 1984 include many of the proposals already made for fiscal 1983.

Citing recent comments by Mr. Bell, Mr. Blankley said the Secretary still believes the present system of six student-aid programs needs to be streamlined. In fiscal 1983, the Administration requested money only for Pell Grants, guaranteed loans, and College Work-Study. In proposals still under consideration for the fiscal 1984 budget, the department has called for the elimination of Supplemental Educational Opportunity Grants and State Student Incentive Grants, and requested no money for National Direct Student Loans.

—JANET HOOK

In Federal Agencies

Health. The Health Resources and Services Administration has published a notice announcing that the annual report of the National Advisory Council on Health Professions Education has been filed with the Library of Congress. Copies are available for inspection at the library and may be obtained free from the agency. (*Federal Register*, November 12, Pages 51,228-9.)

Health. The Department of Health and Human Services has published a list of the data-collection forms it has submitted for review to the Office of Management and Budget. (*Federal Register*, November 15, Page 51,474.)

Health. The Health Resources and Services Administration has published a notice announcing that the annual report of the National Advisory Council on Nurse Training has been filed with the Library of Congress. Copies are available for inspection by the public at the library and may be obtained free from the administration. (*Federal Register*, November 18, Page 51,946.)

Military recruiting. The Defense Department has published an amendment clarifying a proposal to bar educational institutions that prohibit visits by military recruiters from receiving financial support from the agency. The public has until December 29 to comment. (*Federal Register*, November 17, Page 51,766.)

Veterans. The Veterans Administration has published final regulations to extend and make changes in the agency's Post-Vietnam Era Veterans Educational Assistance program. The changes implement a law passed last year by Congress. (*Federal Register*, November 17, Pages 51,743-8.)

Drop in Students' Borrowing Tied to Tighter Standards

Continued from Page 1

money lent dropped from $7.8-billion in fiscal 1981 to $6.1-billion in fiscal 1982—significantly less than the $7.8-billion that the Reagan Administration projected early this year when the President asked Congress to make further changes in the loan program to curtail federal spending.

Although the $6.1-billion borrowed in fiscal 1982 was 21.7 per cent less than the amount borrowed in 1981, it was still 26 per cent more than the $4.84-billion of fiscal 1980.

Borrowing levels were unusually high in 1981, the department said, in part because many students rushed to get loans before the department began applying tighter eligibility rules.

Under a law that took effect on October 1, 1981, students from families earning more than $30,000 a year must meet more stringent financial-need standards to qualify for loans. Previously all students, regardless of income, were eligible to borrow up to $2,500 if they were undergraduates and $5,000 if they were in graduate school.

Misunderstandings Blamed

Many college and government officials say the decline in borrowing is not entirely a result of the tighter eligibility restrictions. Some middle-income students have misunderstood the new law, the officials say, and have not bothered to apply because they assumed incorrectly that they were automatically ineligible.

Students whose families earn more than $30,000 can still qualify for a loan if they pass a financial-need test, which takes into account other factors affecting the ability to pay tuition costs, including the size of a family and the cost of attending a particular institution.

Education Secretary Terrel H. Bell contends that the decline in borrowing since the restrictions were applied is "heartening evidence that the Administration is cutting unnecessary aid without interfering with the delivery of aid to those in need."

"We are cutting the fat while still meeting real needs," Mr. Bell said.

This year the Administration recommended additional restrictions on student-loan subsidies—including one that would have forced graduate students to borrow under a more expensive loan program—all of which were rejected by Congress.

'No Need' for New Restrictions

• Charles B. Saunders, Jr., vice-president for governmental relations at the American Council on Education, said the drop in the number of loans in 1982, despite Congress's rejection of the Administration's latest budget-cutting proposals, "proves that there is no crying need for additional restrictions in the program."

Raising questions about the department's suggestion that the principal effect of the new income limits had been to eliminate "waste and abuse," Mr. Saunders said reductions in federal aid might have forced some students to attend lower-priced institutions.

Citing statistics to support that contention, Peter J. Keitel, vice-president of the New York State Higher Education Services Corporation, said that while overall enrollment at New York colleges increased slightly this year, the number of students dropped at the more expensive institutions—such as graduate schools and private four-year colleges—and rose at the less expensive two-year colleges.

Transition at Kentucky State

Continued from Preceding Page

nearby Bagdad, a freshman majoring in computer science. She quit school at 16 and is continuing her education after an 18-year absence.

Mrs. Desmond says she chose Kentucky State because it was close to her home, less expensive than other institutions, and had the curriculum she wanted. She admits that friends made comments about her attending a "black" university, "but it doesn't bother me a bit," she says.

"There have been no hostilities whatsoever," she adds. "Everybody has been extremely nice."

Louise Bryant, a freshman business-administration major from Frankfort, had some reservations about attending Kentucky State.

"At first I didn't think I wanted to go," she says, but her apprehensions have since disappeared. Because she attends classes during the day, she is in the minority in many of them, but she has found that "everybody gets along real well."

Some black students have reservations about Kentucky State's transition from predominantly black to predominantly white.

"I think we've found out we're more alike than different."

"I'm for integration, but the influx of white students has been somewhat detrimental—detrimental to blacks who want to go to a black school," says Francis Maddox, a sophomore computer-science major from Philadelphia. "I don't have any gripes or hang-ups about whites, but I'm somewhat disappointed that the ratio of black students has decreased over the years."

KENTUCKY STATE UNIVERSITY

Kentucky State President Raymond Burse

Mr. Maddox says the curriculum has improved as the institution has sought to attract more white students, but "the danger is you could lose your identity. In the future, programs may not be geared toward blacks. Programs in the future may be geared toward the majority."

George Sykes, a freshman computer-science major from Shelbyville, Ky., shares some of Mr. Maddox's concerns but is optimistic. "People won't forget," he says. "Just because the race of people changes doesn't mean the ideals change." But, he adds, an emphasis on white enrollment could jeopardize the institution's appeal to black students. "It's losing a lot of black students because of that fact," he says. "Some feel they might be overruled."

Concerns like those of Mr. Sykes and Mr. Maddox have periodically surfaced as Kentucky State has shifted from mostly black to mostly white, according to Charles H. Lambert, assistant to the president for university relations and an alumnus of Kentucky State. "But the general feeling is we're changing with the times," Mr. Lambert says. "Kentucky State University can change with the times and still preserve the heritage it always had without being offensive to anyone."

"If it is attractive to whites, it is also attractive to blacks."

Mr. Lambert adds, "When you build on the quality you already have, and publicize that fact, more and more people appreciate that and want to be a part of it.

"If it is attractive to whites, it is also attractive to blacks. We're trying to attract conscientious students of both races."

"We're looking for an integrated society," says Gertrude C. Ridgel, who is chairman of the division of science, mathematics, and nursing and has been at Kentucky State for more than 20 years.

"In such a society, all groups of people need to learn a little more about each group."

"More than in any other institution," she says, "students at Kentucky State have the opportunity for learning the ethical nature of the two races.

"I don't think we've found a lot of differences. I think we've found out we're more alike than different."

White Enrollments at Other Black Colleges

Besides Kentucky State University, three other historically black institutions now have more white students than black students—all as a direct result of the Supreme Court's *Brown* v. *Board of Education* decision in 1954.

Changes in West Virginia

The most dramatic changes occurred at two colleges in West Virginia—Bluefield State College and West Virginia State College.

Bluefield State, founded in 1895, opened its doors to white students following the Supreme Court decision, and within 10 years white students outnumbered black.

The institution later became a commuter college, phasing out its dormitories in the late 1960's. As a nonresidential institution, it began to reflect even more the almost totally white area in which it is located.

Today, black students make up about 13 per cent of the 2,800 students at Bluefield State.

The number of blacks may seem low for a historically black college, but it is high for a college in a state with a black population of below 6 per cent, says Mark C. Rowh, executive assistant to the president.

West Virginia State, founded in 1891, began to admit all qualified students after the Brown decision.

"It was a boon to local white folks who didn't have a local college to go to," says Alan W. Draney, director of development.

Within two years, the enrollment doubled, and by 1959 half of the students were white.

White enrollment continued to mushroom. Today, black students constitute just 18 per cent of the total of 4,400 students.

But at both Kentucky State and West Virginia State, black students dominate the residential and social life. "Black students wonder why more white students are not involved," says Mr. Draney, "but that's a factor of commuting." Over 90 per cent of the students commute, including half of the black students.

Rapid Growth in Missouri

Lincoln University in Missouri, established in 1866, now has about 2,800 students, roughly 30 per cent of whom are black and 10 per cent foreign-born.

Within 10 years of its decision to admit anyone who was qualified, enrollment doubled. By 1971, it had increased 400 per cent, according to Mark W. Muessig, university information officer.

The increase is due mostly to the influx of white commuting students, Mr. Muessig says.

The institution still serves about the same number of black students as it always has.

Three other historically black institutions enroll a proportionately large number of white students.

Attraction of Lower Costs

Bowie State College and Delaware State College both cite their proximity to population centers and their low tuition as reasons for the increase in the number of white commuting students.

Delaware State, which is 33 per cent white, is located near an Air Force base and is cheaper than the state's other four-year institution, the University of Delaware, which is 50 miles away.

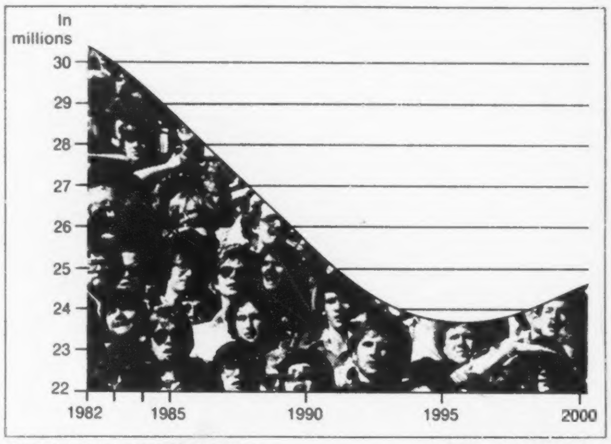
The influx of white students to Bowie State began with the expansion of the surrounding community in the mid-1960's. The college, now about 40 per cent white, is also seen as a low-cost alternative to the University of Maryland.

Merger in Tennessee

Tennessee State University merged with the predominantly white University of Tennessee in Nashville in 1979, as part of a desegregation plan.

The combined institution is about 35 per cent white. Recently, a motion was filed in U.S. district court on behalf of a group of Tennessee State faculty members and students, charging that the desegregation plan had failed and that the university was resegregating.

The Projected Dip in Population of Americans of College Age



CHRONICLE CHART BY PETER H. STAFFORD

SOURCE: U. S. CENSUS BUREAU

Projected population of Americans aged 18 through 24 is charted above. The table below shows cumulative changes from 1982 levels.

	18 years old		18 through 24		18 and over	
	Number	Change	Number	Change	Number	Change
1982	4,185,000	—	30,344,000	—	169,264,000	—
1983	4,012,000	− 4.1%	30,055,000	− 1.0%	171,680,000	+ 1.4%
1984	3,772,000	− 9.9%	29,476,000	− 2.9%	173,829,000	+ 2.7%
1985	3,655,000	−12.7%	28,715,000	− 5.4%	175,834,000	+ 3.9%
1990	3,429,000	−18.1%	25,777,000	−15.1%	185,409,000	+ 9.5%
1995	3,329,000	−20.5%	23,684,000	−21.9%	192,501,000	+13.7%
2000	3,758,000	−10.2%	24,590,000	−19.0%	200,604,000	+18.5%
2025	3,673,000	−12.2%	25,447,000	−16.1%	234,671,000	+38.6%
2050	3,647,000	−12.9%	25,659,000	−15.4%	244,057,000	+44.2%

Note: Population figures, for July 1 of each year, are "middle series" projections, which assume that women will average 1.9 births, that net immigration per year will be 450,000, and that life expectancy at birth will reach 79.6 years by 2050. Percentages shown are cumulative changes from 1982 figures.

SOURCE: U. S. CENSUS BUREAU, CURRENT POPULATION REPORTS, SERIES P-25, NO. 922

Enrollment of Summer Students Rose 7.5 Pct. in 1981

Summer enrollment of full-time-equivalent students went up substantially in 1981, according to the Chronicle Survey.

Data on credit hours for which students enrolled during the past two years showed that enrollment of undergraduates, on a full-time-equivalent basis, rose only 2 per cent during the full year, 1981-82, but that summer enrollment of undergraduates was up 7.5 per cent.

	Average F.T.E. enrollment 1981 (a)	Change from 1980 (b)	1-year change at individual institutions		
			Average (c)	High (d)	Low (e)
Public institutions					
Research and Ph.D.-granting universities	1,106	+ 9.9%	+ 2.4%	+ 8.9%	− 4.1%
Comprehensive colleges and universities	484	+ 3.7%	+ 5.2%	+11.7%	− 1.3%
2-year colleges	376	+ 6.8%	+ 7.8%	+22.7%	− 7.1%
All public	**609**	**+ 7.6%**	**+ 6.7%**	**+18.7%**	**− 5.3%**
Private institutions					
Research and Ph.D.-granting universities	292	+ 3.7%	+ 8.0%	+ 16.2%	− 0.3%
Comprehensive colleges and universities	167	+ 4.3%	+ 4.8%	+ 23.4%	−13.7%
Liberal-arts colleges					
Selective	66	− 5.7%	+49.4%	+117.3%	−18.5%
Less selective	79	+20.4%	+ 7.5%	+ 24.1%	− 9.1%
2-year colleges	25	+27.4%	+ 11.9%	+ 37.2%	−13.4%
All private	**170**	**+ 5.1%**	**+10.3%**	**+ 28.2%**	**− 7.6%**
All public and private	**514**	**+ 7.5%**	**+ 8.6%**	**+ 23.6%**	**− 6.5%**

Note: Survey data are based on a stratified random sample of 150 public and 150 private colleges and universities. Technical inquiries about the survey design and sampling techniques should be addressed to John Minter Associates, P.O. Box 107, Boulder, Colo. 80306.

(a) Full-time-equivalent enrollment is based on the number of credit hours taken by students in each category, divided by 30. Averages that combine types of student or types of institution are weighted according to enrollment of each type.

(b) Percentage change in aggregate F.T.E. enrollment of undergraduates for each category in the summer of 1981 compared with the summer of 1980.

(c) Average of the percentage changes reported by the institutions in each category.

(d) About one-fifth of the institutions reported gains larger than the "high" percentage (mean per cent of change plus one mean deviation).

(e) About one-fifth of the institutions reported smaller gains or greater losses than the "low" percentage (mean per cent of change minus one mean deviation).

SOURCE: SURVEY FOR THE CHRONICLE BY JOHN MINTER ASSOCIATES

Enrollment

Continued from Page 1

etary as well as nonprofit institutions.

Two formerly well-established trends appear to have been reversed this fall:

▶ Enrollment of women has grown much faster than enrollment of men in recent years, but this fall the number of female students declined by 0.4 per cent while the number of male students increased by 0.2 per cent.

▶ Enrollment of part-time students has been outpacing enrollment of full-time students, but this year the opposite is true, with part-time enrollment down by 0.7 per cent and full-time enrollment up by 0.3 per cent.

The enrollment changes this fall continue a third trend: the shift from private to public higher education.

Of every 1,000 college students enrolled last fall, 780 were on public campuses; this fall, that number rose to 783. Ten years ago, 766 of every 1,000 college students were at public institutions.

Ten years ago, women constituted 43 per cent of all college students. Between 1974 and 1979, the number of female college students increased by 32.6 per cent while the number of male students increased by only 1.4 per cent.

By the fall of 1979, women had become the majority among college students with 51 per cent of the total. This year, 51.6 per cent of all college students are women.

If 1982 does mark the end of the accelerated growth of female enrollment, it could be because women have overcome the historical disparity in enrollment rates. The Census Bureau estimates that women account for 51.3 per cent of the total U.S. population in 1982. Thus, women have more than proportionate representation in the ranks of college students.

Part-time students account for 41.7 per cent of this fall's total. In the past seven years, enrollment of part-time students has increased at an average rate of 4.9 per cent a year, while the average increase for full-time students is 2.3 per cent.

The economic recession is cited by some officials in higher education as one reason for the apparent reversal this year of the trend toward part-time study. More people may have time for full-time study because they are out of work, the argument goes.

Even as this is happening, the officials speculate, the higher cost of full-time study must be pushing some financially hard-pressed students in the opposite direction.

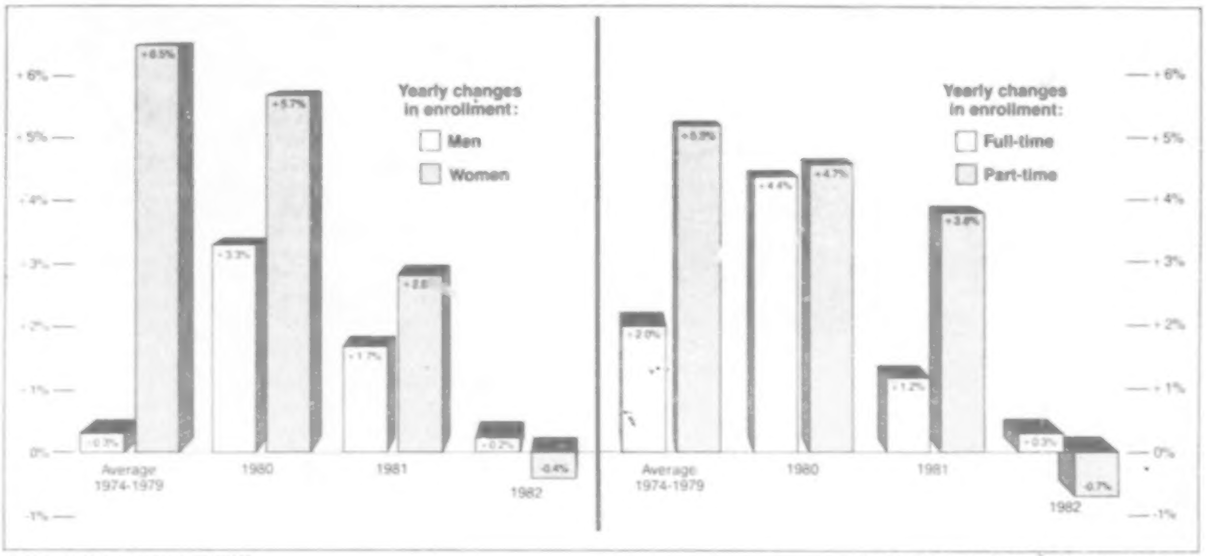
The increase in total enrollment in public higher education this fall is a result of the continuing growth of community colleges. They gained an estimated 62,045 students, up 1.5 per cent to a total of 4,494,202.

An earlier survey by the National Institute of Independent Colleges and Universities of this fall's enrollment at private colleges and universities—not including proprietary institutions—found total enrollent down 0.8 per cent, mostly due to a drop of 3.8 per cent in full-time freshmen. (*The Chronicle*, November 3.)

John D. Phillips, president of the N.I.I.C.U., blamed the decline on "federal cuts in student aid and the threat of deeper cuts." He said new students were being forced to abandon plans to enroll at private colleges and were, instead, postponing college attendance or choosing less expensive public institutions.

FACT-FILE

Fall Enrollments at Public and Private Institutions



CHRONICLE CHART BY PETER H. STAFFORD

SOURCE: NATIONAL CENTER FOR EDUCATION STATISTICS

Public Institutions

	Full-time students			Part-time students			All students		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Doctoral level	970,241	822,411	1,792,652	261,519	293,679	555,198	1,231,760	1,116,090	2,347,850
1-year change	− 0.7%	− 1.0%	− 0.9%	− 0.1%	− 1.3%	− 0.7%	− 0.6%	− 1.1%	− 0.8%
Comprehensive	695,578	727,531	1,423,109	336,861	435,968	772,829	1,032,439	1,163,499	2,195,938
1-year change	− 0.2%	− 1.5%	− 0.9%	− 1.2%	− 3.3%	− 2.4%	− 0.6%	− 2.2%	− 1.4%
General baccalaureate	123,479	126,631	250,110	69,695	86,416	156,111	193,174	213,047	406,221
1-year change	+ 3.5%	+ 1.4%	+ 2.4%	− 0.8%	− 1.2%	− 1.0%	+ 2.0%	+ 0.3%	+ 1.1%
Specialized	115,323	45,213	160,536	15,269	15,066	30,335	130,592	60,279	190,871
1-year change	+ 4.1%	+ 3.9%	+ 4.1%	− 3.8%	− 4.5%	− 4.2%	+ 3.1%	+ 1.6%	+ 2.6%
2-year	817,958	827,911	1,645,869	1,189,562	1,658,771	2,848,333	2,007,520	2,486,682	4,494,202
1-year change	+ 3.0%	+ 3.2%	+ 3.1%	+ 0.5%	+ 0.4%	+ 0.4%	+ 1.5%	+ 1.3%	+ 1.4%
New †	9,285	6,409	15,694	10,574	13,188	23,762	19,859	19,597	39,456
1-year change	+110.1%	+72.6%	+93.0%	− 4.3%	+ 3.7%	0.0%	+28.4%	+19.3%	+23.7%
All	2,731,864	2,556,106	5,287,970	1,883,480	2,503,088	4,386,568	4,615,344	5,059,194	9,674,538
1-year change	+ 1.1%	+ 0.5%	+ 0.8%	0.0%	− 0.5%	− 0.3%	+ 0.6%	0.0%	+ 0.3%

Private Institutions

	Full-time students			Part-time students			All students		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Doctoral level	276,973	200,063	477,036	91,789	91,642	183,431	368,762	291,705	660,467
1-year change	− 1.5%	− 1.1%	− 1.3%	− 6.9%	− 5.5%	− 6.2%	− 2.9%	− 2.5%	− 2.7%
Comprehensive	198,806	191,102	389,908	106,752	106,299	213,051	305,558	297,401	602,959
1-year change	− 0.7%	+ 1.0%	+ 0.1%	− 4.8%	− 3.7%	− 4.2%	− 2.2%	− 0.7%	− 1.4%
General baccalaureate	273,068	323,602	596,670	69,604	104,003	173,607	342,672	427,605	770,277
1-year change	− 2.1%	− 2.6%	− 2.4%	+ 2.2%	− 0.7%	+ 0.4%	− 1.3%	− 2.1%	− 1.8%
Specialized	155,443	93,879	249,322	60,966	57,441	118,407	216,409	151,320	367,729
1-year change	− 1.9%	− 0.3%	− 1.3%	0.0%	− 4.2%	− 2.1%	− 1.[illegible]	− 1.8%	− 1.5%
2-year	65,586	93,499	159,085	19,009	29,573	48,582	84,595	123,072	207,667
1-year change	+ 8.8%	+ 1.4%	+ 4.3%	+13.2%	+ 3.2%	+ 6.9%	+ 9.8%	+ 1.8%	+ 4.9%
New †	29,781	13,255	43,036	21,090	10,453	31,54[illegible]	50,871	23,708	74,579
1-year change	− 3.7%	−10.9%	− 6.0%	− 3.2%	− 3.2%	− 3.2%	− 3.5%	− 7.7%	− 4.9%
All	999,657	915,400	1,915,057	369,210	399,411	768,621	1,368,867	1,314,811	2,683,678
1-year change	− 1.0%	− 1.0%	− 1.0%	− 2.4%	− 3.0%	− 2.7%	− 1.4%	− 1.6%	− 1.5%

All Institutions

	Full-time students			Part-time students			All students		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Doctoral level	1,247,214	1,022,474	2,269,688	353,308	385,321	738,629	1,600,522	1,407,795	3,008,317
1-year change	− 0.9%	− 1.0%	− 1.0%	− 2.0%	− 2.3%	− 2.2%	− 1.1%	− 1.4%	− 1.2%
Comprehensive	894,384	918,633	1,813,017	443,613	542,267	985,880	1,337,997	1,460,900	2,798,897
1-year change	− 0.3%	− 1.0%	− 0.7%	− 2.1%	− 3.3%	− 2.8%	− 0.9%	− 1.9%	− 1.4%
General baccalaureate	396,547	450,233	846,780	139,299	190,419	329,718	535,846	640,652	1,176,498
1-year change	− 0.4%	− 1.5%	− 1.0%	+ 0.7%	− 0.9%	− 0.3%	− 0.1%	− 1.3%	− 0.8%
Specialized	270,766	139,092	409,858	76,235	72,507	148,742	347,001	211,599	558,600
1-year change	+ 0.6%	+ 1.0%	+ 0.7%	− 0.8%	− 4.3%	− 2.5%	+ 0.3%	− 0.9%	− 0.2%
2-year	883,544	921,410	1,804,954	1,208,571	1,688,344	2,896,915	2,092,115	2,609,754	4,701,869
1-year change	+ 3.4%	+ 3.0%	+ 3.2%	+ 0.7%	+ 0.4%	+ 0.5%	+ 1.8%	+ 1.3%	+ 1.5%
New †	39,066	19,664	58,730	31,664	23,641	55,305	70,730	43,305	114,035
1-year change	+10.5%	+ 5.7%	+ 8.9%	− 3.6%	+ 0.5%	− 1.9%	+ 3.7%	+ 2.8%	+ 3.4%
All	3,731,521	3,471,506	7,203,027	2,252,690	2,902,499	5,155,189	5,984,211	6,374,005	12,358,216
1-year change	+ 0.5%	+ 0.1%	+ 0.3%	− 0.4%	− 0.9%	− 0.7%	+ 0.2%	− 0.4%	− 0.1%

Note: Data are preliminary estimates based on a survey of more than 1,300 institutions. Private institutions include proprietary as well as nonprofit institutions.

† New institutions are those included in such surveys for three years or less and not yet assigned to a regular institutional category.

SOURCE: NATIONAL CENTER FOR EDUCATION STATISTICS

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News Summary

Articles on inside pages

The editor of the Dartmouth College alumni magazine has resigned in a dispute with the college president involving the publication's autonomy. Story on Page 3.

Ratings of doctoral programs in chemical, civil, electrical, and mechanical engineering were released last week. Fact-File on Page 8.

Lincoln University has settled out of court with several faculty members who sued the administration, charging violation of their constitutional rights. Story on Page 10.

The athletic program at Louisiana State University's Baton Rouge campus has bounced back this fall, following what one observer called "a year to forget." Story on Page 13.

Clemson University's football program has been put on probation by the National Collegiate Athletic Association for a six-year string of violations. Story on Page 13.

Faculty evaluation by students is one of the most controversial issues on U.S. campuses. Story on Page 19.

Union officials consider "ominous" and "intolerable" a recent ruling by the National Labor Relations Board. Story on Page 19.

Textbooks for courses in Western civilization are experiencing something of a renaissance following several years of poor sales. Story on Page 23.

Israeli officials have withdrawn a requirement that foreign faculty members at universities on the occupied West Bank sign statements disavowing support for the Palestine Liberation Organization. Story on Page 17.

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No Coherence to Humanities, Bennett Charges

Courses are 'a jumble,' says endowment's chief

By **MALCOLM G. SCULLY**

WASHINGTON

Humanities courses in colleges and schools have degenerated into "a jumble of indiscriminate offerings" with "no rationale and no guidance or coherence for the mind or imagination," according to William J. Bennett, chairman of the National Endowment for the Humanities.

Speaking at last week's meeting of the National Council of Teachers of English, Mr. Bennett criticized "the flabby defenses of education in our time," and called for a return to tradition and rigor.

"The author Robertson Davies said that 'the purpose of learning is to save the soul and enlarge the mind.' " Mr. Bennett said. "I fear that there are not many people responsible for elementary, secondary, and higher education in America today who would be prepared to defend that statement."

Yet, he added, "intellectual refinement and spiritual elevation are the traditional goals of the humanities and should remain so."

'Uninformed Judgment'

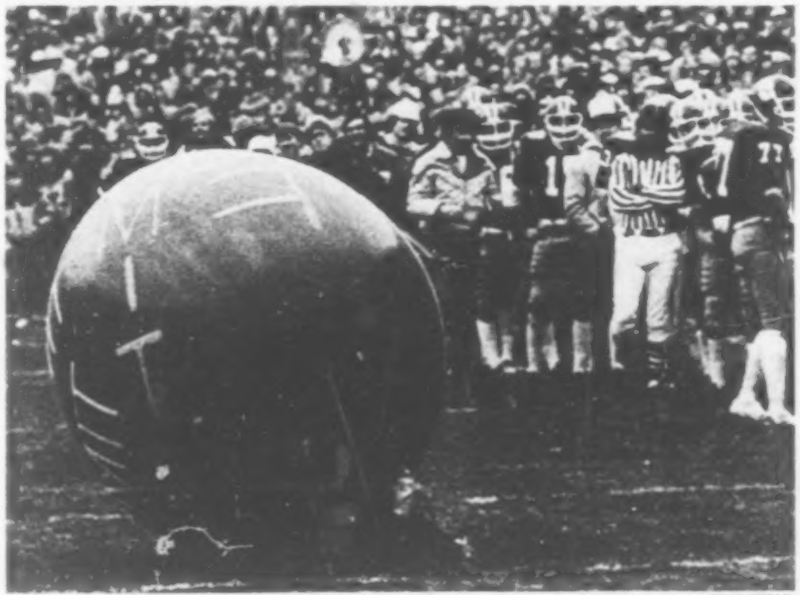
Mr. Bennett criticized contemporary educators for replacing those goals with curricula that were at the same time shallow and fragmented. He said many educators had rejected the cultivation of intellectual refinement and spiritual elevation because they believed them to be elitist or arbitrary.

"In place of cultivation, we advocate something called 'awareness,' which may be defined as a state of indiscriminate perception and uninformed judgment," he said. "Some teachers have reduced themselves to awareness facilitators, awareness guides, multicultural travel agents."

Mr. Bennett added that without any co-

Continued on Page 12, Column 1

IVY SEASON ENDS WITH A BANG


WIDE WORLD

During the Harvard-Yale football game, a mysterious object bearing the letters MIT appeared from a hole in the field. It inflated, then exploded. Play was held up for five minutes while workmen repaired the field.

Making It to a Football Bowl Takes More than a Good Record

By **N. SCOTT VANCE**

Last week marked the end of the football season for most of the country's big-time college teams, but for 32 of them the excitement was just beginning to build.

It was the week that the top teams were invited to play in and share the profits of the 16 postseason college football bowls.

At the University of Maryland, for example, those telephoning the athletic department were greeted with a jubilant "Aloha," as the Terrapins prepared to jet to Honolulu for the first-ever Aloha Bowl, December 25.

Among the less fortunate teams was Stanford University's, which had a prospective invitation to the Hall of Fame Bowl snatched from under its nose because of a last-second, fluke play that lost the previous week's game against the University of California at Berkeley.

Teams making it to the bowls earn big money for their institutions. The "major bowls"—those played on New Year's Day, for example—will pay the universities represented well over $1-million each.

Bowl appearances are also good "image

Continued on Page 16, Column 1

'We Can't Cut Anything More'

Tales of austerity are common around the University of Oregon campus these days. The institution is in the midst of what may be one of the longest-running budget crises in the history of public higher education. Since 1980, the state's eight-campus system of higher education has suffered an 18-per-cent loss in purchasing power, and one survey has placed Oregon dead last among the 50 states in support for higher education. Story on Page 6.

FACT–FILE

Evaluations of 326 Programs in Engineering

WASHINGTON

Ratings of 326 doctoral programs in four engineering disciplines have been published here by the National Academy Press.

The report on engineering is the third of five based on a study of the quality of graduate education, conducted by a committee named by the Conference Board of Associated Research Councils, which comprises the American Council of Learned Societies, the American Council on Education, the National Research Council, and the Social Science Research Council.

The first report—on mathematics and the physical sciences—was published in September (*The Chronicle*, September 29), and the second—on the humanities—in November (*The Chronicle*, November 10). Still to come are reports on the biological sciences and the social and behavioral sciences.

The assessment of programs in chemical, civil, electrical, and mechanical engineering included 16 measures "related to quality." The committee did not attempt to develop a combined rating based on those measures and stressed that no one measure could be interpreted as being the definitive indicator of quality.

"Indeed, the committee is convinced that no single measure adequately reflects the quality of a research-doctorate program and wishes to emphasize the importance of viewing individual programs from the perspective of multiple indices or dimensions," the report on the assessment said.

Among the 16 measures were four based on a survey of the reputations of doctoral programs, in which 579 faculty members in engineering were asked to rate the following:

▶ The scholarly competence and achievements of the faculty members in a stratified random sample of the departments in their field.

▶ The effectiveness of those departments in educating research scholars and scientists.

▶ The improvement of the programs over the past five years.

They were also asked to indicate how familiar they were with the programs they rated.

The results were presented in both raw scores and in standardized values, converted from raw scores with a mean of 50 and a standard deviation of 10. About two-thirds of all programs rated had standardized scores between 40 and 60 and 95 per cent had standardized scores between 30 and 70.

Copies of the report, *An Assessment of Research-Doctorate Programs in the United States: Engineering*, are available for $10.50 each from the National Academy Press, 2101 Constitution Avenue, N.W., Washington 20036.

Following are the standardized values for the ratings:

Chemical Engineering

	Faculty quality (a)	Effectiveness (b)	Improvement (c)	Familiarity (d)
U. of Akron	32	29	42	34
Auburn U.*	34	34	49	43
Brigham Young U.	47	48	55	47
City U. of New York				
Graduate Sch.	51	51	42	48
U. of California				
Berkeley	71	70	48	70
Los Angeles	49	47	69	48
California Inst. of Tech.	71	70	67	68
Carnegie-Mellon U.	60	61	44	62
Case Western Reserve U.	51	53	46	49
Catholic U.	34	32	36	36
U. of Cincinnati	44	44	45	43
Clarkson C.	48	50	44	50
Clemson U.	38	40	43	40
U. of Colorado	53	53	54	58
Columbia U.	47	48	38	46
U. of Connecticut	49	48	63	50
Cornell U.	57	57	62	58
U. of Delaware	69	67	46	70
U. of Florida	54	55	45	53
Georgia Inst. of Tech.	50	50	69	51
U. of Houston	65	61	74	66
U. of Idaho	33	35	37	36
U. of Illinois	64	66	37	63
Illinois Inst. of Tech.	47	46	36	53
Iowa St. U.	54	58	55	53
U. of Kansas	44	43	46	39
Kansas St. U.	44	44	45	43
U. of Kentucky	41	42	51	41
Lehigh U.	50	53	51	50
Louisiana St. U.	47	47	49	43
U. of Maryland	47	48	44	45
U. of Massachusetts	55	56	65	56
Massachusetts Inst. of Tech.	67	65	57	66
U. of Michigan*	57	57	29	63
Michigan St. U.	42	40	47	42
U. of Minnesota	73	73	50	70
U. of Missouri				
Columbia	43	43	49	43
Rolla	47	47	55	45
Montana St. U.	33	34	31	37
New Jersey Inst. of Tech.	40	37	51	40
North Carolina St. U.	50	52	62	47
Northwestern U.	62	63	52	64
U. of Notre Dame	56	56	67	58
Ohio St. U.	50	52	49	48
U. of Oklahoma	47	49	46	43
Oklahoma St. U.	46	47	52	42
Oregon St. U.	52	51	47	54
U. of Pennsylvania	63	61	63	66
Pennsylvania St. U.	53	53	61	55
U. of Pittsburgh	45	48	53	45
Polytech. Inst. of New York	41	42	30	42
Princeton U.	64	64	32	64
Purdue U.	61	60	66	64
Rensselaer Polytechnic Inst.	49	50	55	49
U. of Rhode Island	40	36	54	39
Rice U.	56	55	43	56
U. of Rochester	54	53	54	55
Rutgers U.	41	41	45	40
U. of Southern California	43	42	60	44
Stanford U.	70	70	48	67
St. U. of New York				
Buffalo	56	52	46	56
C. of Environmental Science and Forestry	36	33	46	34
Stevens Inst. of Tech.	37	36	46	39
Syracuse U.	48	40	46	44
U. of Tennessee	49	49	49	45
U. of Texas	61	60	61	61
Texas A&M U.	48	47	48	45
Tulane U.	38	36	31	41
U. of Tulsa	40	40	55	39
U. of Utah	46	49	51	45
Vanderbilt U.	39	40	44	36
U. of Virginia	48	50	66	55
Washington U. (Mo.)	52	54	58	51
U. of Washington	58	58	60	56
Wayne St. U.	40	41	49	37
West Virginia U.	47	48	53	45
U. of Wisconsin	72	72	45	71
Worcester Polytechnic Inst.	40	46	38	41
Yale U.	50	50	43	46

Note: Ratings are standardized on a scale where 50 represents the average score for all rated departments.
(a) Rating of scholarly quality of faculty members in the program.
(b) Rating of the effectiveness of the program in education of research scholars or scientists.
(c) Rating of improvement in program quality in the last five years.
(d) Rating of the evaluators' familiarity with the work of program faculty.
* Program was initiated after 1970.
n.a. Not available.

Civil Engineering

	Faculty quality (a)	Effectiveness (b)	Improvement (c)	Familiarity (d)
U. of Arizona	44	43	56	45
Brown U.	58	59	37	48
U. of California				
Berkeley	75	74	51	79
Davis	55	55	68	55
Los Angeles	58	57	51	58
California Inst. of Tech.	71	71	49	66
Carnegie-Mellon U.	57	55	59	60
U. of Cincinnati	38	39	54	38
Clemson U.	42	38	49	43
U. of Colorado	53	54	56	53
Colorado St. U.	51	62	59	50
Columbia U.	57	59	38	49
U. of Connecticut	41	40	46	42
Cornell U.	66	66	60	71
Drexel U.*	42	30	57	46
Duke U.	50	49	49	49
U. of Florida	45	47	44	41
Georgia Inst. of Tech.	57	58	61	57
U. of Houston	43	42	66	44
U. of Illinois	72	72	44	73
Illinois Inst. of Tech.	39	39	24	47
U. of Iowa	50	52	43	47
Iowa St. U.	51	51	45	51
Johns Hopkins U.	35	33	34	39
U. of Kansas	50	49	63	50
Lehigh U.	59	57	45	60
U. of Maryland	46	48	54	47
U. of Massachusetts	50	52	63	51
Massachusetts Inst. of Tech.	74	72	46	76
U. of Michigan	61	62	44	62
Michigan St. U.	47	48	39	46
U. of Minnesota	51	50	47	49
U. of Missouri				
Columbia	45	47	48	43
Rolla	46	48	48	48
New Jersey Inst. of Tech.*	37	35	n.a.	36
U. of New Mexico	45	43	49	44
North Carolina St. U.	54	52	52	51
Northwestern U.	64	65	54	65
U. of Notre Dame	41	42	38	44
Ohio St. U.	51	52	39	48
U. of Oklahoma	43	46	39	41
Oklahoma St. U.	45	47	47	44
Oregon St. U.	48	49	58	47
U. of Pennsylvania	46	48	44	45
Pennsylvania St. U.	48	50	40	50
U. of Pittsburgh	46	45	45	43
Polytech. Inst. of New York	39	43	34	36
Princeton U.	61	60	60	62
Purdue U.	64	63	54	68
Rensselaer Polytechnic Inst.	51	50	67	53
U. of Rhode Island*	36	35	n.a.	38
Rice U.	52	49	42	40
Rutgers U.	41	41	42	43
U. of Southern California	50	48	52	47
Stanford U.	67	70	52	69
St. U. of New York, Buffalo	46	48	46	46
Syracuse U.	40	43	49	40
U. of Tennessee*	44	45	57	42
U. of Texas				
Arlington*	37	38	51	39
Austin	67	65	60	71
Texas A&M U.	56	55	59	53
Texas Tech U.	39	37	53	40
Tulane U.	38	35	46	40
U. of Utah	39	43	52	38
Utah St. U.	50	53	57	41
Vanderbilt U.				
Civil & environmental	36	34	29	43
Environmental & water resources	47	45	35	43
U. of Virginia	47	40	55	43
Virginia Poly. Inst. & St. U.	52	50	65	51
Washington U. (Mo.)	50	51	44	56
U. of Washington	61	60	66	60
Wayne St. U.	32	34	35	41
West Virginia U.	44	44	57	45
U. of Wisconsin	59	59	54	53

Electrical Engineering

	Faculty quality (a)	Effectiveness (b)	Improvement (c)	Familiarity (d)
Air Force Inst. of Tech.	37	37	45	44
U. of Arizona	53	55	60	48
Arizona St. U.	46	44	68	42
Auburn U.	41	44	53	39
Brown U.	55	55	46	49
City U. of New York				
Graduate Sch.	45	48	39	46
U. of California				
Berkeley	75	75	55	77
Davis	49	47	56	48
Irvine	45	44	48	49
Los Angeles	67	67	58	70
San Diego	58	53	68	52
Santa Barbara	57	56	60	55
California Inst. of Tech.	63	63	45	57
Carnegie-Mellon U.	62	62	65	61
Case Western Reserve	51	52	39	52
Catholic U.	29	32	41	37
U. of Cincinnati	40	41	55	41
Clarkson C. of Tech.	35	32	39	42
U. of Colorado	57	53	55	57
Colorado St. U.	47	46	58	47
Columbia U.	57	58	39	59
U. of Connecticut	46	48	60	47
Cornell U.	66	66	61	66
Drexel U.	42	43	51	45
Duke U.	47	49	49	47
U. of Florida	56	55	55	57
Georgia Inst. of Tech.	57	56	62	57
U. of Hawaii	52	50	48	54
U. of Houston	37	41	45	44
U. of Illinois				
Chicago Circle*	45	47	61	45
Urbana-Champaign	73	73	51	77
Illinois Inst. of Tech.	41	41	32	44
U. of Iowa	42	42	40	43
Iowa St. U.	49	50	38	42
Johns Hopkins	56	57	44	51
U. of Kansas	46	48	53	42
Marquette U.	39	39	51	35
U. of Maryland	58	57	62	55
U. of Massachusetts	51	51	58	55
Massachusetts Inst. of Tech.	76	75	47	80
U. of Michigan	64	61	37	67
Michigan St. U.	50	53	38	48
U. of Minnesota	57	56	46	54
Mississippi St. U.	35	32	44	40
U. of Missouri				
Columbia	44	44	40	42
Rolla	49	51	51	47
New Jersey Inst. of Tech.	35	33	50	38
U. of New Mexico	44	47	58	48
North Carolina St. U.	49	50	68	47
Northeastern U.	42	40	48	43
Northwestern U.	56	57	48	55
U. of Notre Dame	51	49	48	52
Ohio U.	32	30	35	39
Ohio St. U.	58	57	49	55
U. of Oklahoma	38	36	35	41
Oklahoma St. U.	42	44	46	40
Oregon St. U.	40	43	59	39
U. of Pennsylvania	55	56	44	46
Pennsylvania St. U.	52	54	44	47
U. of Pittsburgh	48	46	45	48
Polytech. Inst. of New York	61	62	33	56
Princeton U.	63	63	35	61
Purdue U.	65	65	46	71

Continued on Page 10, Column 1

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FACT-FILE—Continued

Evaluations of 326 Programs in Engineering

Electrical Engineering

Continued from Page 8

	Faculty quality (a)	Effective-ness (b)	Improve-ment (c)	Famil-iarity (d)
Rice U.	55	57	51	57
U. of Rochester	46	46	46	45
Rutgers U.	40	39	39	41
U. of Southern California	67	65	64	69
Southern Methodist U.	48	49	30	46
Stanford U.	75	75	54	78
St. U. of New York				
Buffalo	46	47	54	48
Stony Brook	48	48	39	45
Syracuse U.	54	53	43	53
U. of Tennessee	47	48	54	41
U. of Texas				
Arlington	40	39	63	41
Austin	60	59	60	56
Texas A&M U.	45	44	54	47
Texas Tech U.	47	51	68	47
U. of Utah	46	47	51	40
Utah St. U.	36	38	45	37
Vanderbilt U.	36	32	40	37
U. of Virginia	45	45	61	46
Virginia Poly. Inst. & St. U.	50	51	60	45
Washington U. (Mo.)	48	51	43	47
U. of Washington	55	54	59	53
Wayne St. U.	41	38	33	45
West Virginia U.	36	38	52	37
U. of Wisconsin	56	56	42	55
Yale U.	54	54	43	57

Note: Ratings are standardized on a scale where 50 represents the average score for all rated departments.
(a) Rating of scholarly quality of faculty members in the program.
(b) Rating of the effectiveness of the program in education of research scholars or scientists.
(c) Rating of improvement in program quality in the last five years.
(d) Rating of the evaluators' familiarity with the work of program faculty.
* Program was initiated after 1970.
n.a. Not available.

Mechanical Engineering

	Faculty quality (a)	Effective-ness (b)	Improve-ment (c)	Famil-iarity (d)
U. of Akron	33	32	54	37
U. of Alabama	34	30	33	38
U. of Arizona	44	46	60	46
Arizona St. U.	49	45	69	48
Auburn U.	40	41	51	37
Brown U.	64	65	43	60
U. of California				
Berkeley	73	73	56	76
Davis	53	54	64	51
Los Angeles	64	63	57	65
California Inst. of Tech.	69	69	37	64
Carnegie-Mellon U.	55	54	51	56
Case Western Reserve U.	55	54	43	57
Catholic U.	36	36	33	36
U. of Cincinnati	42	49	53	40
Colorado St. U.	47	49	50	45
Columbia U.	56	53	32	52
U. of Connecticut	43	45	44	44
Cornell U.	64	64	55	62
U. of Delaware	45	47	61	46
Drexel U.*	44	48	53	46
Florida U.	45	46	60	49
Georgia Inst. of Tech.	54	54	50	58
U. of Houston	52	50	73	53
U. of Illinois				
Chicago Circle	50	53	52	44
Urbana-Champaign	63	64	57	65
Illinois Inst. of Tech.	50	50	34	58
U. of Iowa	46	52	58	46
Iowa St. U.	53	53	58	52
Johns Hopkins U.	62	49	24	55
Kansas St. U.	39	41	41	42
U. of Kentucky	46	43	45	42
Lehigh U.	56	57	60	58
U. of Maryland	49	51	48	47
U. of Massachusetts	46	45	51	45
Massachusetts Inst. of Tech.	76	74	51	81
U. of Miami	28	28	46	36
U. of Michigan	65	63	41	66
Michigan St. U.	49	49	56	48
U. of Minnesota	68	67	51	66
U. of Missouri, Columbia	37	37	41	41
U. of Missouri, Rolla	46	45	49	42
New Jersey Inst. of Tech.	35	35	49	42
U. of New Mexico	33	32	55	35
North Carolina St. U.	53	52	58	48
Northwestern U.	60	58	58	64
U. of Notre Dame	49	51	45	53
Ohio St. U.	53	53	52	55
U. of Oklahoma	46	41	46	49
Oklahoma St. U.	49	49	51	50
Old Dominion U.	39	37	56	36
Oregon St. U.	44	48	50	43
U. of Pennsylvania	55	55	66	52
Pennsylvania St. U.	52	54	42	53
U. of Pittsburgh	38	40	36	38
Polytech. Inst. of New York	48	47	23	46
Princeton U.	66	69	59	65
Purdue U.	65	66	49	69
Rensselaer Polytechnic U.	58	59	66	58
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Rice U.	53	53	51	48
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Rutgers U.	47	46	38	47
St. U. of New York				
Buffalo	48	48	41	46
Stony Brook	51	52	45	45
U. of Southern California	45	45	50	44
Stanford U.	74	75	52	79
Stevens Inst. of Tech.	41	38	44	42
Syracuse U.	42	41	39	42
U. of Tennessee				
Knoxville	42	42	45	40
Space Institute	39	43	41	37
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Texas A&M U.	46	45	63	49
Tulane U.	39	38	36	43
Vanderbilt U.	41	46	51	41
U. of Virginia	49	54	61	50
Virginia Poly. Inst. & St. U.	53	54	58	48
Washington U. (Mo.)	46	45	57	42
U. of Washington	54	51	40	53
Wayne St. U.	44	43	57	42
U. of Wisconsin	60	61	51	62
Yale U.	54	49	40	55

SOURCE: CONFERENCE BOARD OF ASSOCIATED RESEARCH COUNCILS

Lincoln U. Reaches Settlement with Professors Who Charged Violation of Constitutional Rights

LINCOLN UNIVERSITY, PA.

The board of trustees and the president of Lincoln University have reached a settlement with several faculty members who sued the institution, charging it with violating their constitutional rights.

The university has agreed to pay the faculty members a total of $30,000, of which $25,000 will go to two professors no longer working at the institution. The university has also agreed to pay $6,848 in other expenses and $24,000 in lawyers' fees.

The lawsuit stemmed, in part, from faculty members' criticism of Herman R. Branson, president of the university since 1970. Battle lines were drawn when the faculty voted "no confidence" in Mr. Branson in a vote of 46 to 10 in April, 1977. The vote was taken after Mr. Branson sent letters to all faculty members notifying them they might be terminated the following year.

The tension between Mr. Branson and the faculty grew with the arrests of two professors during demonstrations in September, 1977, following the removal of one of the professors, C. James Trotman, as chairman of the English department. Mr. Trotman was subsequently fired.

During that same year, the faculty and Mr. Branson again were at odds when the university allegedly tried to force Edward Groff, a professor who had been ill, to retire.

When a protest against his policies was scheduled to coincide with a visit by ex-President Gerald R. Ford in April, 1978, Mr. Branson sent telegrams to a number of faculty members threatening disciplinary action if the demonstration was held.

A demonstration did take place, but no firings resulted.

Mr. Trotman, Mr. Groff, and several faculty members brought suit in federal district court in June, 1978, charging that Mr. Branson's actions had violated their constitutional rights of freedom of speech, assembly, and association. The court decided in favor of Mr. Branson and th university, but the U.S. Court of Appeals for the Third Circuit reverse the ruling and ordered a new trial.

Mr. Branson and the universit trustees, while continuing to den that they had violated the constitutional rights of any faculty members agreed to settle out of court rathe than go through another trial.

Mr. Trotman, now an assistan professor of English at West Cheste State College, received $10,000, an Mr. Groff, who is on medical leave was given $15,000. Several other faculty members shared $5,000.

David Kairys, the lawyer for th faculty members who sued, call the settlement "the most favorab decision toward the rights of teache that there's been in a long time," b said it did not end "the underlyin dispute" at Lincoln.

Mr. Branson declined to commen

Medical Enrollments Fall for First Time in 20 Years

WASHINGTON

Halting a 20-year trend of increasing enrollment, U.S. medical schools this fall admitted fewer students than in 1981.

The drop—only 0.5 per cent, from 16,644 students admitted in 1981 to 16,567 this fall—occurred despite the addition of one newly accredited institution, the Mercer School of Medicine in Georgia, and larger entering classes at eight other schools.

According to the Association of American Medical Colleges, the number of new students is down because 14 medical schools reduced the size of their entering classes by 5 or more students, generally blaming the loss of state or federal funds.

The number of applicants dropped 2.7 per cent from a year ago, continuing a decline that began in 1975. The ratio of applicants to first-year medical-school slots this fall was 2.2 to 1, the same as in the past three years.

A spokesman for the medical-college association said some schools might also be attempting to reduce the size of their entering classes because of concern that the number qualified applicants might drop fu ther in future years.

Members of minority groups mak up 8.4 per cent of this year's enterin class, down slightly from 8.6 per ce last fall. They account for 8.3 p cent of total medical-school enrol ment. Women make up 31.4 per ce of the entering class, compared wi 30.7 per cent last year. Women no account for 29.4 per cent of total e rollment.

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Bowl Games

Continued from Page 1

builders," officials say, helping spur nationwide interest in the universities involved and increasing donations from alumni.

The bowls, which are owned and operated by nonprofit corporations, offer the closest thing to a championship tournament that big-time college football has. The unofficial "national champion" in college football is determined by news-service polls in which coaches and sportswriters rank the country's top teams during and at the end of the season. The results of bowl games play an important role in the final rankings.

While the bowl structure functions much like a championship tournament—pitting top teams against one another following the season—teams need more than simply a good won-lost record to earn a bowl invitation.

Five of the bowls, including four of the five major ones, have contracts with athletic conferences specifying that the conference's champion will be one of the two teams appearing in the bowl. The Rose Bowl always features the champions of the Big 10 and Pacific-10 Conferences, and the Cotton, Sugar, and Orange bowls each reserve one of their two spots for the winner in the Southwestern, Southeastern, or Big 8 conference, respectively.

The California Bowl is played between the champions of the Pacific Coast Athletic Association and the Mid-American Athletic Conference.

The other 11 bowls have no restrictions on whom they invite.

To earn one of the bowl spots not determined by a conference championship, a team must be as good at bringing fans to the stadium, and viewers to their television sets, as it is at winning football games.

The Universities of New Mexico and Tulsa, for instance, boasted 10-1 records for the season but received no bowl invitations.

At the time invitations were extended, better season records had been posted by only 2 of the 32 teams receiving invitations.

By contrast, the University of Wisconsin, with a 6-5 record, and Kansas State University, with a 6-4-1 record, will face each other in the Independence Bowl, December 11 in Shreveport, La..

"I used to be under the impression that your [won-lost] record was the most important factor in getting a bowl invitation," said Tulsa's athletic director, John Cooper, who had urged the Independence Bowl committee to choose his team. "But now I think it's probably fifth or sixth on the list of priorities that the bowl people have in selecting teams."

Chief among those other priorities, according to John H. Junker, the Fiesta Bowl's assistant executive director, is "whether a team has a national following and will create an interest on the part of a TV audience."

Campaigning to Get In

Since it takes more than a good record to get to a bowl game, university and conference officials are sometimes faced with waging a campaign to make themselves look attractive to the committees that bowls appoint to select contestants.

"I worked very hard to see if we couldn't get a bowl invitation this year," said John Bridgers, athletic director at New Mexico. "But it just never worked out."

Mr. Bridgers said he had talked with representatives of six bowls, many of whom expressed some interest in New Mexico, but none of them made an offer. While his team had an impressive year, it was the first such season in about a decade, and the team attracted only about 23,000 fans to each of its home games, which is few by big-time football standards.

"They kept saying, 'We've got you on our list,' but they just weren't used to seeing our name on the winning side of the ledger," he said.

"It can be very frustrating," agreed Mickey Holmes, executive director of the Sugar Bowl and former commissioner of the Missouri Valley Conference, to which Tulsa belongs. As a commissioner, he had unsuccessfully lobbied selection committees in the past to invite Tulsa to a bowl game.

"You think you've got a very qualified team but nobody seems interested," he said. "So you just keep trying to get the bowl committees to watch them, and keep trying to get them interested."

In addition to the money paid to the institutions whose teams make bowl appearances—often shared with others in their athletic conferences—officials say the games help the universities project a good image.

"The television exposure is great for the university," said Maryland's athletic director, Richard M. Dull. "Through athletics, the university has an opportunity to promote its educational message. A university certainly couldn't afford to buy that time on national TV."

Maryland was blessed this year with three bowl invitations, Mr. Dull said, and picked the Aloha Bowl, even though the "payday" there won't be quite as great as it would be at the Tangerine and Sun Bowls.

"This bowl won't interfere with our [final] examination schedule," he explained, and it "provides the greatest TV exposure in our primary recruiting areas."

Mr. Dull allowed the Maryland players to vote on which bowl bid to accept and said they favored the Honolulu game "by 10 to 1. It wasn't much of a contest." The Aloha Bowl is expected to pay about $350,000 per team, Mr. Dull said, but expenses will take a big bite out of that. It will cost about $150,000 simply to transport the players to and from Hawaii, he said.

Helps in Raising Funds

Appearing in bowl games also helps pry open the pocketbooks of alumni and supporters, even when it comes time to support nonathletic activities, said L. Donald Shields, president of Southern Methodist University. His institution appeared in the Holiday Bowl two years ago and will appear this year in the Cotton Bowl after finishing the season with 10 wins and a tie.

One facet of the institution's fund-raising effort, a telephone campaign directed at alumni in the Dallas area, brought the university $150,000 in 1980, $250,000 in 1981, and $505,000 in 1982, he said.

"That money supports academic programs," he said, "and there's no question that the success of the football program has contributed to the increase."

The Match-Ups for This Year's Bowl Games

Bowl	Date	Time (EST)	Location	TV	Teams	1981 funds
Aloha	Dec. 25	7 p.m.	Honolulu	ESPN	Maryland vs. U.C.L.A. or Washington	Not available
Bluebonnet	Dec. 31	8 p.m.	Houston	ESPN	Arkansas vs. Florida	$902,000
California	Dec. 18	4 p.m.	Fresno, Cal.	ESPN	Bowling Green vs. Fresno State	Not available
Cotton	Jan. 1	2 p.m.	Dallas	CBS	Pittsburgh vs. Southern Methodist	$3,260,082
Fiesta	Jan. 1	1:30 p.m.	Tempe, Ariz.	NBC	Arizona State or Washington vs. Nebraska or Oklahoma	$1,750,000
Gator	Dec. 30	9 p.m.	Jacksonville, Fla.	ABC	Florida State vs. West Virginia	$1022,498
Hall of Fame	Dec. 31	2 p.m.	Birmingham, Ala.	ESPN	Air Force vs. Vanderbilt	$800,000
Holiday	Dec. 17	9 p.m.	San Diego	ESPN	Brigham Young vs. Ohio State	$572,358
Independence	Dec. 11	8 p.m.	Shreveport, La.	ESPN	Kansas State vs. Wisconsin	$436,266
Liberty	Dec. 29	8 p.m.	Memphis, Tenn	ESPN	Alabama vs. Illinois	$819,734
Orange	Jan. 1	8 p.m.	Miami	NBC	Louisiana State vs. Nebraska or Oklahoma	$3,076,848
Peach	Dec. 31	3 p.m.	Atlanta	CBS	Iowa vs. Tennessee	$753,239
Rose	Jan. 1	5 p.m.	Pasadena, Cal.	NBC	Michigan vs. Arizona State or U.C.L.A.	$5,733,126
Sugar	Jan. 1	8 p.m.	New Orleans	ABC	Georgia vs. Penn State	$2,642,000
Sun	Dec. 25	3 p.m.	El Paso, Tex.	CBS	North Carolina vs. Texas	$650,000
Tangerine	Dec. 18	8 p.m.	Orlando, Fla.	ESPN	Auburn vs. Boston College	$610,000

NOTES: ESPN—Entertainment and Sports Programming Network; 1981 funds—amounts divided between teams

Sports People

Jeff Cavana, swimming coach at Highlands High School (Fort Thomas, Ky.), to men's and women's swimming coach at Wright State U.

Duncan Hinckley, men's swimming coach at State U. of New York College at Geneseo, also to women's swimming coach.

Proverb Jacobs, director of men's physical education at Laney College, to director of athletics.

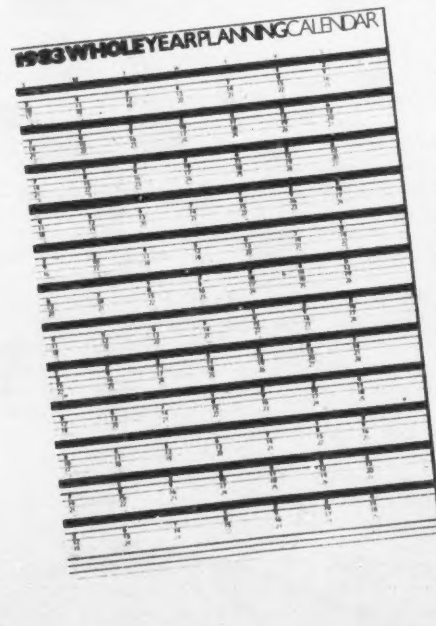
Jeff Marmon, men's tennis coach at La Salle College, also to women's tennis coach.

Louise O'Neal, assistant director of athletics for women's sports and facility management at Dartmouth College, to associate director of athletics.

John Robinson, football coach at U. of Southern California, to senior vice-president for university relations.

August R. Schmidt, assistant director of men's athletics at Carthage College, to director of athletics.

Scott Schultz, head professional at a tennis club in Lansing, Mich., to men's and women's tennis coach at Western Michigan U.



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- **C.** *11 — 27 July*. Middle Ages. Radke (Syracuse); Brentano (Berkeley).
- **D.** *28 July — 13 August*. Renaissance & Baroque. Barricelli (U.Cal./Riverside); Newell Jenkins.

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News Summary

Articles on inside pages

Colleges' endowments have received a double boost from the stock and bond markets. Story on Page 3.

A 10-per-cent increase is anticipated this year in states' spending for student aid. Story and Fact-File on Pages 4 and 5.

The Chronicle Survey finds that colleges and universities increased aid to students by about 9 per cent in 1981-82, in spite of federal cutbacks. Story and Table on Pages 6 and 7.

Documentaries and new curricula are among the tools colleges are using to combat the problem of adult illiteracy. Story on Page 8.

Bowing to a federal court's order, Brigham Young University has turned over to the Internal Revenue Service the names of hundreds of donors. Story on Page 11.

Federal officials say they are drafting rules to minimize the paperwork colleges must undertake to carry out a law linking draft registration and student aid. Story on Page 11.

A new kind of insurance has been designed to protect colleges if auditors find improper use of student-aid money. Story on Page 14.

The Bollingen Series, inspired by the psychologist Carl Jung and consisting of more than 200 books in psychology, literature, mythology, and other fields, is nearing completion after 40 years. Story on Page 27.

Controversy is continuing in Israel over a requirement that foreign faculty members at Arab universities on the West Bank disavow support for the Palestine Liberation Organization. Story on Page 21.

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Colleges, States Weigh Rules to Make Tenure Harder to Get, Easier to Lose

By MALCOLM G. SCULLY

Changes that would make it harder for faculty members to earn tenure and easier for colleges to lay off those who already have it are being considered by several institutions and state systems of higher education.

The proposals would not eliminate tenure but would give colleges more flexibility in revising or eliminating academic programs at a time of dwindling resources and shifting student interests.

They are widely viewed as indications that the principle of academic tenure, which has always had its critics, will face intensified pressure over the next several years.

Several faculty organizations, including the American Association of University Professors, the American Federation of Teachers (A.F.L.-C.I.O.), and the National Education Association have expressed opposition to many of the proposed changes.

Matthew W. Finkin, chairman of the A.A.U.P.'s Committee A on Academic Freedom and Tenure, said that he was "terribly concerned" about some of the changes now being discussed.

Robert M. Nielsen, assistant to the president for higher education at the A.F.T., said, "There is no question that there is an effort to take advantage of the current fiscal crisis to do in tenure."

Layoffs of tenured faculty members are becoming more common. A story and a list of recent layoffs appears on Page 23.

Among recent developments:

▶ IN NEVADA: The state university

Continued on Page 24, Column 1

"Once you say that your tenure exists only so long as your program is popular, then you have no tenure at all."

—Matthew W. Finkin of the AAUP

National Teleconference Network to Link 66 Colleges This Week

By PAUL DESRUISSEAUX

An independent network formed by 66 colleges and universities to broadcast live conferences, seminars, and lectures across the country is offering its first program this week.

Through the National University Teleconference Network, continuing-education and extension programs at member institutions in 38 states and the District of Columbia will offer to their local constituents an opportunity to participate in programs being held at other universities in all parts of the country.

For example, a physician in Florida interested in a medical seminar being held at the Los Angeles County–University of Southern California Medical Center and broadcast over the network will go to the University of Miami to participate in it, via satellite and telephone links.

"The value of the teleconference is that it is live," says J. O. Grantham, director of extension programs at Oklahoma State University and chairman of the seven-member executive committee coordinating the project. "Our network will feature one-way video but two-way audio transmission, so that programming will be interactive. Those attending can do more than listen, they can actually participate" by asking questions of speakers following the presentations they have just delivered perhaps thousands of miles away.

This week's program, "Automated Office and Electronic Meetings for Today's Managers," will be an audio-only conference conducted over telephone lines. The first conference transmitted by satellite and broadcast over closed-circuit television will be next month.

The network was conceived last spring by a group of continuing-education spe-

Continued on Page 10, Column 1

Publishers Plan to Sue University over Copyrights

Defendants not named but will include scholars

By STACY E. PALMER

WASHINGTON

Citing "egregious abuses" of copyright law on college and university campuses nationwide, the Association of American Publishers revealed plans last week to sue a university, several individual scholars at that institution, and a commercial photocopying service it says have violated copyright regulations.

Association officials refused to name the university or other prospective defendants, but they said the action would be filed by mid-December.

Although the publishers' association has previously coordinated successful suits by publishers against the so-called "copy mills" that allegedly ignore copyright laws when photocopying books and articles for students and professors, its new suit would be its first legal action aimed directly at universities and professors for using illegally copied materials.

"This is a pervasive practice which must be stopped," said Carol A. Risher, director of copyright for the association.

Victory in Squibb Case

The impending suit follows a recent A.A.P. victory in a suit against the E. R. Squibb & Sons Corporation, a pharmaceutical company. In an out-of-court settlement, the company acceded to publishers' demands that royalty fees be paid when material is copied from technical journals—even if the articles are used for research purposes within the company.

Allan Wittman, chairman of the A.A.P. copyright committee, said the outcome of the Squibb case should "frighten people on and near campuses into understanding that publishers will defend their rights. They can't just throw material onto a copy machine and not pay the owners."

The publishers' association had previously won cases against the Gnomon Corporation, a photocopying service based in Cambridge, Mass., with outlets near Cornell, Pennsylvania State, and Yale

Continued on Page 25, Column 1

Presidents Lobbying NCAA Delegates

Among the 132 proposals on the agenda at next month's National Collegiate Athletic Association convention are several aimed at tightening academic standards. College presidents backing those proposals are asking their colleagues for support.

For summaries of all 132 proposals, see the "Athletics" section, Pages 15 to 20.

Endowments Buoyed by Rises in Value of Stocks, Bonds

By JACK MAGARRELL

College endowment funds have received a double-barreled boost from the increase in market values of both stocks and bonds during the past four months, a higher-education investment official said last week.

Rodney H. Adams, chairman of the investment committee of the National Association of College and University Business Officers and treasurer of Stanford University, said that endowment funds have benefited from the fact that they are usually more balanced between stocks and bonds than other investment funds.

On the average, colleges and universities have about 54 per cent of their endowments invested in stocks and about 46 per cent invested in bonds, according to NACUBO studies of endowment policies. Other investment funds, Mr. Adams said, tend to be more strongly committed to either stocks or bonds.

That balance of college investments eased the pain of a declining market earlier in the year, when bonds generally were performing better than common stocks. The balance then heightened the institutions' gains when the stock market began to make dramatic increases in August.

'A Dismal Year'

The market surge of the past few months has erased some of the discouragement seen in a preliminary report of the NACUBO investment committee's annual study of endowment investments.

The NACUBO report, which covered the 12-month period ending June 30, said that the endowment funds "appear to have had a dismal year."

For the year ending June 30, the 155 endowment funds included in the study showed a combined loss of 1.21 per cent in their net return. The net return is change in market value plus dividends and interest. If adjusted for an inflation rate of 6.8 per cent, as indicated by the Consumer Price Index for the same 12 months, the average net loss for endowments would be about 8 per cent.

Endowments are "not immune" to declining stock markets, Mr. Adams said. For the year ending June 30, stock indexes showed a net loss of about 12 per cent. The endowments' losses were smaller because of their investments in the bond market, which gained 6 per cent or more during the same period.

If the NACUBO report had been based on a 12-month period ending September 30 instead of June 30, Mr. Adams said, the figures would have looked much better.

At Stanford, for example, the net return on endowment investments for the 12 months ending June 30 was a gain of less than 1 per cent, he said, but for the 12 months ending September 30, the net gain was over 16 per cent.

Between June 30 and November 30, the market value of Harvard University's endowment rose from roughly $1.7-billion to $2-billion.

The market value of Princeton University's endowment rose from $885.8-million on June 30 to $1.082-billion on October 31.

Smoothing Formulas

Mr. Adams said the surge in stock prices would not result in any immediate, dramatic increases in spending from college endowment funds.

Most institutions use spending formulas that link withdrawals from their endowments to earnings and market values averaged over periods of three to five years.

Such formulas smooth out the ups and downs of short-term changes in the market, to produce a steadier flow of funds into college budgets.

Mr. Adams noted that many institutions try to spend less than their endowments earn, reinvesting part of the net return to offset inflation.

Because some colleges and universities have more than one endowment fund, 155 funds but only 137 participating institutions are included in the study of endowment performance.

The final report, with a detailed analysis of the endowment investments, is scheduled for publication by NACUBO next spring.

Endowments' Average Returns

	Average total return*			
	1 year	3 years	5 years	10 years
All endowments	− 1.21%	+ 8.11%	+ 7.60%	+ 5.01%
Size of endowment fund				
Over $50-million	− 1.68%	+ 8.92%	+ 8.35%	+ 5.08%
$10-million to $50-million	− 1.54%	+ 8.40%	+ 7.90%	+ 5.07%
Under $10-million	− 0.15%	+ 6.59%	+ 6.19%	+ 4.77%
Per cent in equity investments				
65% or more	− 6.62%	+ 8.20%	+ 8.01%	+ 5.01%
50% to 65%	− 1.38%	+ 8.70%	+ 8.05%	+ 5.00%
Under 50%	+ 3.46%	+ 7.37%	+ 6.79%	+ 5.01%
Comparative measures				
Equities				
Dow Jones Industrial Average	−11.70%	+ 4.88%	+ 3.45%	+ 3.70%
Standard & Poor's Industrials	−12.64%	+ 7.63%	+ 7.21%	+ 4.49%
Standard & Poor's 500	−11.76%	+ 7.68%	+ 7.19%	+ 4.79%
Bonds				
Salomon Brothers	+ 6.65%	− 4.08%	− 1.38%	+ 2.69%
Lehman Brothers–Kuhn Loeb	+ 9.04%	− 1.18%	+ 0.64%	—
Common Fund**				
Equities	−13.25%	+11.31%	+12.72%	+ 5.35%
Bonds	+10.98%	+ 0.10%	+ 2.30%	—
Consumer Price Index	+ 7.08%	+10.25%	+ 9.68%	+ 8.51%
Higher Education Price Index***	+ 9.92%	+ 9.88%	+ 8.81%	+ 7.80%

Note: Data are preliminary results of a study of 155 investment pools of 137 participating colleges and universities.

* Changes in market value, plus dividends and interest, for periods ending June 30, 1982.

** A nonprofit organization through which educational institutions pool investments.

*** An index of changes in prices paid by colleges and universities for goods and services developed by D. Kent Halstead, National Institute for Education.

— Not available.

SOURCE: NATIONAL ASSOCIATION OF COLLEGE AND UNIVERSITY BUSINESS OFFICERS

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complaint brought by John Moore, a white member of the Albany State faculty who was passed over for the job.

Old Dominion President Censured by Faculty Senate

Old Dominion University's faculty senate has voted to censure President Alfred B. Rollins, Jr., for recommending to the university's board of visitors that two administrators be given tenure and faculty-rank promotions that had never been submitted to peer-review procedures described in the faculty handbook.

John Moore, an executive vice-president, and David Hager, acting vice-president for academic affairs, were promoted to full professor and granted tenure by the visitors last summer at Mr. Rollins's suggestion, a university spokesman said.

3 Colleges in Texas Consider Merging

Three black colleges in Texas are studying the feasibility of a merger to allow them to strengthen their financial base while maintaining their tradition of preparing black ministers.

The three church-related institutions—Wiley College, Texas College, and Huston-Tillotson College—have enrollments of about 600 students each. All three have been plagued with financial difficulties.

John M. Robinson, a lawyer who heads a commission studying the proposed merger, said several options would be considered, including closing two of the colleges and transferring all students to the remaining college, keeping all three open under a single administration, or keeping them open and dropping duplicate programs.

Duffey Under Fire at U. of Massachusetts

UNIVERSITY OF MASSACHUSETTS

Joseph D. Duffey, above, the new chancellor at the University of Massachusetts at Amherst, has been criticized by faculty members and state officials after the university made a settlement with an assistant chancellor who had threatened to sue because her job was being changed.

Mr. Duffey, chancellor since October 1 and former chairman of the National Endowment for the Humanities, authorized a year's leave with full pay for Marie Reid after the black administrator, who served as director of the Office of Planning and Budget, threatened to sue for race and sex discrimination. Her $52,000 a year salary is one of the highest in the state system.

Some faculty members and other administrators have charged that Ms. Reid received favored treatment.

President Dismissed at College in South Carolina

Charles F. Ward, who was indicted in June on charges of obtaining property under false pretenses, has been dismissed as president of Trident Technical College in Charleston, S.C.

Mr. Ward had been placed on an unpaid "investigative leave" at the time of the indictment, which charged him with submitting improper travel-reimbursement vouchers.

Rutgers Accused of Fighting Bill to Raise Drinking Age

Supporters of legislation that would raise the legal age for consuming alcoholic beverages in New Jersey have charged that officials at Rutgers University are trying to block the measure in part because the campuses would lose income from their pubs.

In a letter to the governor, a group of citizens and local organizations called the Committee to Raise the Drinking Age also contended that Rutgers officials were being urged to oppose the bill by alcohol distillers who financed university programs.

A spokesman said neither the university nor the Center for Alcohol Studies, the only program that receives industry funding, has taken an official position on the bill, although some individuals from the university have testified on the legislation.

The bill, which would raise the drinking age from 19 to 21, has been stalled in a legislative committee since last summer.

Notes

The University of Virginia has withdrawn its sanction of "Easters," a weekend party in April that in recent years has drawn at least 25,000 people to Charlottesville and brought complaints of drunkenness and property damage from police and city residents. A university official cited those complaints and a "potential for tragedy" as reasons for the decision. . . . Stanford University has established a center to handle distribution of computer programs developed by faculty members to colleagues, to commercial companies for their own use, and to commercial distributors for marketing on behalf of the university. Since 1980, the university has earned nearly $1.3-million from the software, officials said.

Notes on . . .

Radio & TV

A $25,000 grant has been given to the Association for Media-Based Continuing Education for Engineers by the International Business Machines Corporation to study the feasibility of setting up a "National Technological University." The university would award engineering degrees to students who take courses via television or in other nontraditional settings. Lionel Baldwin, dean of engineering at Colorado State University, will direct the study.

The university would offer graduate degrees to students unable to meet normal university residency requirements.

The association is an Atlanta-based consortium of 23 universities formed in 1976 to improve the effectiveness of continuing education for engineers.

▪

More than 35,000 students have enrolled this fall for television courses distributed by the Public Broadcasting Service's Adult Learning Service—an increase of 37 per cent over enrollment last fall, according to a P.B.S. announcement.

The service's courses are being offered for credit by more than 400 colleges and universities in cooperation with about 220 public television stations.

▪

Four proposals to produce nontraditional university-level courses will share an additional $3-million from the Corporation for Public Broadcasting–Annenberg School of Communications Project. The project, financed by Walter H. Annenberg, publisher of *TV Guide*, hopes to demonstrate that courses of high quality can be produced using television and other nontraditional "delivery systems."

The four projects and the amounts of their new grants are:

▶ "The Brain" produced by WNET-TV in New York, $1.3-million.

▶ "We the People," a course on Congress, produced by WETA-TV in Washington, $400,000.

▶ "The Mechanical Universe," produced by the California Institute of Technology, $1.1-million.

▶ "Visual Mathematics," produced by the Educational Development Center, Inc., and the Consortium for Mathematics and Its Applications, $200,000.

Mr. Annenberg has pledged $150-million over 15 years to support the project.

▪

Total income for public radio and television stations failed to keep pace with inflation in the 1981 fiscal year, according to a preliminary report from the Corporation for Public Broadcasting.

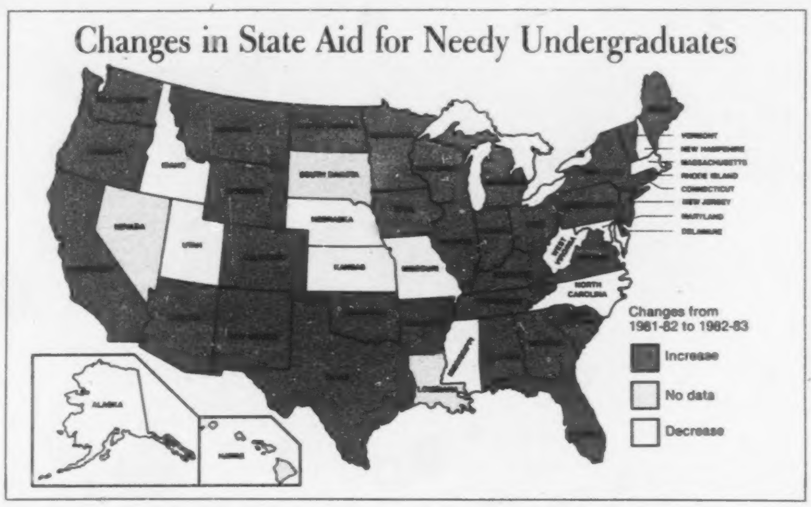
Income from all sources totaled $759.8-million in 1981, an increase of 7.8 per cent over fiscal 1980, the report said. However, when adjusted for inflation, the total was actually 2 per cent less than 1980 income, it added.

The report said 10.5 per cent of the stations' income came from public colleges and universities and 2.5 per cent from private institutions.

—MALCOLM G. SCULLY

Student Aid from States Expected to Jump 10 Pct. This Year

By **JANET HOOK**



Changes in State Aid for Needy Undergraduates

State spending for grants to needy college students is expected to increase by almost 10 per cent this year—the largest increase since 1978-79—according to a survey by the National Association of State Scholarship and Grant Programs.

The survey also found that a growing number of states have responded in the past year to expected reductions in federal student assistance by proposing or setting up new loan, work-study, and grant programs.

Based on its annual survey of state scholarship programs, the association estimates that state expenditures for grants to undergraduates will increase 9.9 per cent—from $890.6-million last year to $978.5-million in 1982-83.

One author of the report on the survey noted that, because the survey is based on preliminary estimates, actual spending this year may fall short of the projected total.

The increase in state spending this year is expected to be coupled with a 3.8-per-cent increase in the number of undergraduates receiving grants—from 1.21 million last year to 1.256 million in 1982-83.

While state student aid is expected to increase nationwide, 12 states said spending for their scholarship programs would be reduced this year. Thirty-four states expect increases, and information was not available for four states.

Much of the growth is concentrated in states with large programs, said the report on the survey by Kenneth R. Reeher, executive director of the Pennsylvania Higher Education Assistance Agency, and Jerry S. Davis, director of research and policy analysis at the Pennsylvania agency.

The 11 states with the largest programs account for over three-quarters of the expected increase in state spending, the report said.

Pennsylvania, which runs one of the largest programs, has increased appropriations for student grants by $7-million to $80-million this year—the largest annual increase since 1968. Coupled with a slight decline in applications for grants, the increased budget has allowed Pennsylvania to provide more aid to middle-income students and to increase the average state grant by about $100.

But in many states with smaller programs—those that award less than $5-million a year—little or no growth is expected. State support for those programs has been slowing over the past two years, Mr. Davis said, noting that only about one-third of the 31 states with small grant programs have increased spending since 1980-81. That lack of growth, he said, suggests that most of those states would not be willing or able to make up for major losses of federal aid to their students.

Many of the smaller programs are heavily dependent on federal funds provided through the State Student Incentive Grant program, in which money is awarded to states if they at least match the federal contribution. Asked about the potential effects of a Reagan Administration proposal to eliminate the incentive grants, four states responding to the survey said their programs would not survive and 24 said they would probably have to reduce the size or number of grants.

Mr. Davis also said there had been "significantly more activity" than last year among states in response to cutbacks in federal student aid. Florida and New Mexico have established their own work-study programs to supplement the federal program, which has been trimmed by 4 per cent in academic 1982-83. New work-study programs are being considered by nine other states: Delaware, Indiana, Kentucky, New Jersey, North Dakota, Oregon, Tennessee, Vermont, and Virginia.

In other actions:

▶ Legislation allowing the sale of state revenue bonds to raise capital for low-interest student loans has been approved in Iowa, Maryland, and Rhode Island within the last year. Several other states are considering similar laws.

▶ Colorado, in an effort to stimulate private support for student aid, has set up a $250,000 pilot program to match private contributions with state funds.

▶ Arkansas and Tennessee are considering new scholarship programs that would provide aid on the basis of academic merit rather than financial need.

▶ Alabama is considering establishing a new agency that would provide additional funds for student loans by buying loans from banks. Several other states have already set up such agencies—known as secondary markets—modeled on the federal Student Loan Marketing Association, which purchases loans nationwide.

While most of the state programs surveyed provide aid to undergraduates on the basis of financial need, the survey also found that $17.8-million was expected to be awarded to needy graduate and professional students—up 4.4 per cent from last year. Of the 21 states reporting that they had such programs for graduate students, only four—California, Michigan, New York, and Texas—said they expected to spend more than $1-million.

The survey also found that about $101-million was expected to be spent on undergraduate grants that are not awarded on the basis on financial need—spending that will be concentrated in a handful of states.

State Financial Assistance for Graduate Students

	Number of awards		Dollars paid out		
	1982-83*	1-year change	1982-83*	1-year change	Average*
Alabama					
Student assistance	58	+163.6%	$ 35,000	+250.0%	$ 603
Arizona					
Incentive grants	151	+ 1.3%	113,000	+ 4.6%	748
California					
Bilingual teacher development	323		1,080,000		
Fellowships	652		2,548		
All **California** programs	975	−21.1%	3,628,000	− 9.6%	3,721
Colorado					
Graduate grants	n/a		608,000	+ 3.6%	1,216
Connecticut					
State supplemental grants ...	n/a		n/a		n/a
Delaware					
Postsecondary scholarships ..	126	+ 7.7%	81,000	+ 9.5%	643
Florida					
Seminole/Miccosukee Indian scholarships	8	+14.3%	6,000	+20.0%	750
Idaho					
Incentive grants	27		12,000	− 7.7%	444
Kansas					
Osteopathic scholarships and loans	15		141,000		9,400
Maryland					
Senatorial grants	148		55,000		
Family-practice medicine grants	n/a		33,000		
Professional school grants ...	n/a		150,000		
Nursing grants	n/a		60,000		
All **Maryland** programs	148		298,000	+11.9%	n/a
Massachusetts					
General scholarships	676		431,000		
Medical and dental scholarships	n/a		400,000		
All **Massachusetts** programs	676	− 3.7%	831,000	− 0.8%	n/a
Michigan					
Tuition grants	1,122	−35.4%	$1,368,000	+28.2%	$1,219
New Jersey					
Educational opportunity grants	348	− 2.2%	807,000	−12.1%	2,319
New York					
Tuition assistance	18,000	+ 2.9%	6,052,000	+ 5.8%	336
North Carolina					
Medical scholarships	67		500,000		
Dental scholarships	19		138,000		
Minority presence scholarships	n/a		360,000		
All **North Carolina** programs	86	+ 8.9%	998,000	+ 9.3%	n/a
Oklahoma					
Tuition aid**	n/a		n/a		
Minority assistance awards ..	31		155,000		
All **Oklahoma** programs ...	31		155,000		5,000
Oregon					
Foreign student fee remission	204		180,000		
Medical and dental grants ...	340		435,000		
All **Oregon** programs	544	+ 9.7%	615,000	−13.4%	1,131
Texas					
Tuition equalization grants ...	1,800		1,931,000		
Public education grants**	n/a		n/a		
All **Texas** programs	1,800	+ 1.5%	1,931,000	+24.3%	n/a
Utah					
Incentive grants**	n/a		n/a		n/a
Wisconsin					
Indian student assistance	10		9,000		900
Wyoming					
Incentive grants	21	+250.0%	36,000	+300.0%	1,714
All need-based programs ...	**24,896**	**− 1.0%**	**$17,760,000**	**+ 4.4%**	**$ 719**

* Estimated.
** Data could not be broken down into graduate versus undergraduate categories.
n/a not available.
Note: Data reported do not represent all state-supported financial aid to students, but only those funds distributed through the identified programs. Totals include 1981-82 appropriations where 1982-83 figures are not available.

SOURCE: NATIONAL ASSOCIATION OF STATE SCHOLARSHIP AND GRANT PROGRAMS

FACT-FILE

State Funds for Undergraduate Student Aid

	Number of awards		Dollars paid out		
	1982-83*	1-year change	1982-83*	1-year change	Average*
Alabama					
Student assistance	2,832	+165.2%	$ 1,700,000	+237.0%	$ 600
Alaska					
Educational incentive grants	155	−37.2%	234,000	−28.9%	1,510
Arizona					
Incentive grant	3,199	+ 1.5%	2,394,000	+ 4.9%	748
Arkansas					
State scholarships	10,377	+ 4.6%	2,335,000	+45.6%	225
California					
State grants	61,945		88,866,000		
Bilingual teacher development	455		1,334,000		
Law-enforcement personnel dependents	7		9,000		
All **California** programs	62,407	− 0.3%	90,209,000	+ 4.5%	1,446
Colorado					
Student incentive grants	n/a		2,094,000		
Student grants	8,800		5,377,000		
All **Colorado** programs	11,735	+10.3%	7,471,000	+ 2.7%	637
Connecticut					
State scholarships	2,200		2,300,000		
Scholastic achievement grants	800		560,000		
Private college student contracts	n/a		n/a		
State supplemental grants	n/a		n/a		
All **Connecticut** programs	11,450	− 1.6%	9,024,000	+ 2.6%	788
Delaware					
Postsecondary scholarships	927	+ 7.9%	593,000	+ 9.0%	640
District of Columbia					
Incentive grants	n/a		n/a		n/a
Florida					
Student assistance grants	18,000		14,036,000		
Seminole/Miccosukee Indian Scholarships	33		24,000		
All **Florida** programs	18,033	+27.8%	14,060,000	+14.1%	780
Georgia					
Incentive grants	16,817	+32.8%	4,645,000	+33.0%	276
Hawaii					
Incentive grants	n/a		n/a		n/a
Idaho					
Incentive grants	873	− 1.6%	481,000	− 3.0%	551
Illinois					
Monetary awards	92,000		94,896,000		
Student-to-student matching grants	1,365		275,000		
All **Illinois** programs	93,365	− 2.2%	95,171,000	+ 6.2%	1,019
Indiana					
Higher educational awards	32,683		22,773,000		
Freedom of choice grants	7,465		6,677,000		
All **Indiana** programs	40,148	+11.4%	29,450,000	+43.1%	734
Iowa					
Scholarships	1,270		700,000		
Tuition grants	10,000		15,600,000		
Voc-tech tuition grants	3,300		992,000		
All **Iowa** programs	14,570	+10.5%	17,292,000	+10.6%	1,187
Kansas					
Scholarships	2,200		865,000		
Tuition grants	4,200		4,125,000		
All **Kansas** programs	6,400		4,990,000	− 0.3%	780
Kentucky					
Incentive grants	4,018		3,289,000		
Tuition grants	4,000		3,267,000		
All **Kentucky** programs	18,018	+10.5%	6,556,000	+ 3.7%	364
Louisiana					
Incentive grants	n/a		n/a		n/a
Maine					
Incentive grants	1,050	−32.3%	550,000	+ 2.4%	524
Maryland					
General state scholarships	5,000		3,100,000		
Senatorial grants	7,252		2,675,000		
Proprietary school grants	180		100,000		
Teacher of deaf development	n/a		5,000		
Aid to children of deceased firemen	8		6,000		
All **Maryland** programs	12,440	+ 0.8%	5,886,000	− 0.6%	n/a
Massachusetts					
General scholarships	25,324	− 3.7%	16,805,000	− 1.6%	664
Michigan					
Competitive scholarships	18,644		15,155,000		
Tuition grants	12,903		15,732,000		
All **Michigan** programs	31,547	−19.2%	30,887,000	+ 7.9%	979
Minnesota					
Scholarships and grants	45,283		29,217,000		
Part-time grants	1,150		300,000		
AVTI tuition subsidy	6,100		1,400,000		
All **Minnesota** programs	52,533	+ 4.8%	30,917,000	+10.3%	589
Mississippi					
Incentive grants	2,400	+ 6.2%	1,247,000	− 5.6%	520
Missouri					
Student grants	11,000	+ 5.6%	$ 8,809,000	− 1.5%	$801
Montana					
Incentive grants	900		400,000	+ 2.6%	444
Nebraska					
Incentive grants	2,200	+10.1%	1,056,000	− 5.6%	480
Nevada					
Incentive grants	n/a		n/a		n/a
New Hampshire					
Incentive grants	1,500		532,000		
Nursing education grants	135		47,000		
All **New Hampshire** programs	1,635	− 1.0%	579,000	− 2.2%	354,000
New Jersey					
Tuition aid	50,526		37,815,000		
Educational opportunity grants	11,247		5,652,000		
Garden State scholarships	7,625		3,600,000		
All **New Jersey** programs	69,398	− 2.4%	47,067,000	+18.3%	678
New Mexico					
Incentive grants	1,500		1,000,000	+38.9%	667
New York					
Tuition assistance	342,000	+ 2.9%	296,548,000	+ 5.8%	867
North Carolina					
Incentive grants	n/a		3,198,000	− 3.1%	591
North Dakota					
Tuition assistance grants	520		211,000		
Student assistance	1,200		509,000		
All **North Dakota** programs	1,720	+ 3.1%	720,000	+ 7.1%	419
Ohio					
Instructional grants	67,000	+ 9.8%	33,856,000	+ 6.3%	505
Oklahoma					
Incentive grants**	17,500	+89.9%	9,000,000	+297.4%	514
Oregon					
Need grants	14,080		7,872,000		
Cash awards	800		485,000		
Foreign student fee remission	136		120,000		
All **Oregon** programs	15,016	− 0.6%	8,477,000	+10.5%	565
Pennsylvania					
State grants	122,750	− 0.5%	89,040,000	+14.8%	725
Rhode Island					
Scholarships and grants	10,346	+19.1%	6,823,000	+14.9%	659
South Carolina					
Private college tuition grants	7,500	− 6.4%	12,981,000	+ 2.8%	1,731
South Dakota					
Incentive grants	n/a		n/a		n/a
Tennessee					
Student assistance awards	19,733	+119.4%	10,038,000	+55.9%	509
Texas					
Tuition equalization grants	18,200		19,520,000		
Public education grants**	6,000		3,133,000		
Academic scholarships	400		250,000		
All **Texas** programs	24,600	+ 1.1%	22,903,000	+22.5%	n/a
Utah					
Incentive grants*	1,495	− 6.5%	1,094,000	− 6.6%	732
Vermont					
Incentive grants	7,350		6,470,000		
Part-time student grants	186		27,000		
All **Vermont** programs	7,536	− 2.2%	6,497,000	+17.5%	862
Virginia					
Scholarship assistance	20,442	+13.4%	4,088,000	+ 9.5%	200
Washington					
Need grants	10,443		6,423,000		
Assistance to blind students	4		2,000		
All **Washington** programs	10,447	−11.3%	6,425,000	+21.1%	615
West Virginia					
Higher education grants	5,220	−18.8%	4,195,000	− 2.4%	804
Wisconsin					
Tuition grants	8,900		10,783,000		
Higher education grants	33,000		11,354,000		
Indian student grants	1,040		891,000		
All **Wisconsin** programs	42,940	+ 5.1%	23,028,000	+10.6%	536
Wyoming					
Incentive grants	279	+244.4%	204,000	+316.3%	731
American Samoa					
Scholarships	n/a		n/a		n/a
Guam					
Professional/technical awards	n/a		n/a		n/a
Puerto Rico					
Incentive grants	n/a		n/a		n/a
Trust Territory					
Scholarships and grants	n/a		n/a		n/a
Virgin Islands					
Territorial grants	n/a		n/a		n/a
Incentive grants	n/a		n/a		n/a
All need-based programs	**1,256,220**	**+ 3.8%**	**$978,475,000**	**+ 9.9%**	**$779**

* Estimated.
** Data could not be broken down into graduate versus undergraduate categories.
n/a not available.
Note: Data reported do not represent all state-supported financial aid to students, but only those funds distributed through the identified programs. Totals include 1981-82 appropriations where 1982-83 figures are not available.

SOURCE: NATIONAL ASSOCIATION OF STATE SCHOLARSHIP AND GRANT PROGRAMS

CHRONICLE SURVEY

Undergraduate Student Aid in College Budgets, 1981-82

Private institutions

	Average amount (b)	1-year change (c)	As per cent of all aid			As per cent of tuition (a)		
			Average (d)	High (e)	Low (f)	Average (d)	High (e)	Low (f)
Ph.D.-granting universities								
Pell grants	$ 775,719	−13%	5%	6%	4%	3%	4%	2%
Supplemental grants	359,004	− 2%	2%	3%	1%	1%	2%	1%
State grants	1,190,601	+ 7%	7%	12%	2%	5%	9%	1%
Institutional grants*	533,137	+ 7%	3%	4%	1%	2%	3%	1%
Total need-based grants	2,519,600	+12%	18%	24%	11%	11%	16%	6%
National Direct Student Loans	939,649	− 3%	6%	9%	3%	4%	5%	2%
Total loans**	2,983,067	+11%	17%	23%	10%	10%	15%	5%
Student earnings***	699,439	− 7%	4%	7%	2%	3%	4%	1%
Total need-based aid	8,410,888	+ 7%	52%	62%	41%	32%	45%	18%
Total non-need-based aid	7,988,105	+18%	44%	54%	35%	28%	40%	16%
Total aid	17,163,272	+13%	100%	100%	100%	63%	81%	45%
Gross tuition and fees	29,266,296	+13%	187%	256%	118%	100%	100%	100%
Comprehensive institutions								
Pell grants	678,170	−11%	11%	17%	5%	8%	13%	2%
Supplemental grants	196,304	+ 2%	3%	5%	1%	2%	3%	1%
State grants	758,720	+ 2%	11%	18%	4%	8%	13%	3%
Institutional grants*	250,138	+19%	4%	7%	1%	2%	4%	1%
Total need-based grants	1,046,878	+10%	17%	27%	8%	10%	14%	6%
National Direct Student Loans	335,576	−18%	5%	7%	3%	3%	4%	2%
Total loans**	1,897,787	+23%	28%	44%	13%	18%	27%	9%
Student earnings***	390,590	− 1%	7%	10%	4%	5%	7%	2%
Total need-based aid	4,532,169	+10%	68%	84%	52%	47%	64%	30%
Total non-need-based aid	1,854,232	+20%	28%	44%	13%	18%	28%	8%
Total aid	6,762,288	+12%	100%	100%	100%	67%	86%	49%
Gross tuition and fees	10,307,304	+13%	167%	215%	118%	100%	100%	100%
Selective liberal-arts colleges								
Pell grants	216,406	−18%	5%	5%	4%	3%	3%	2%
Supplemental grants	134,808	+ 4%	3%	4%	1%	1%	2%	1%
State grants	207,757	− 4%	4%	8%	1%	3%	5%	0%
Institutional grants*	683,006	+13%	14%	19%	8%	7%	10%	4%
Total need-based grants	1,561,991	+26%	31%	38%	25%	18%	22%	13%
National Direct Student Loans	195,815	−15%	4%	5%	3%	2%	3%	1%
Total loans**	828,461	+27%	17%	22%	11%	9%	12%	6%
Student earnings***	280,974	+ 6%	6%	7%	4%	3%	4%	2%
Total need-based aid	3,062,268	+18%	62%	70%	54%	35%	43%	26%
Total non-need-based aid	1,597,332	+21%	34%	42%	27%	19%	24%	14%
Total aid	4,846,753	+19%	100%	100%	100%	56%	65%	47%
Gross tuition and fees	8,795,368	+18%	188%	215%	161%	100%	100%	100%
Less selective liberal-arts colleges								
Pell grants	305,329	−10%	14%	20%	8%	12%	18%	5%
Supplemental grants	81,855	− 1%	4%	6%	2%	3%	5%	1%
State grants	221,068	+ 6%	10%	16%	4%	8%	14%	2%
Institutional grants*	77,020	+23%	5%	9%	1%	3%	6%	1%
Total need-based grants	291,020	+10%	16%	25%	7%	11%	16%	6%
National Direct Student Loans	117,698	−19%	5%	8%	3%	4%	7%	2%
Total loans**	447,107	+16%	25%	39%	11%	19%	28%	9%
Student earnings***	170,372	− 3%	8%	12%	4%	7%	11%	2%
Total need-based aid	1,434,179	+ 4%	72%	86%	58%	56%	71%	41%
Total non-need-based aid	530,863	+42%	26%	40%	12%	20%	30%	9%
Total aid	2,001,624	+11%	100%	100%	100%	77%	94%	59%
Gross tuition and fees	2,610,878	+16%	140%	171%	109%	100%	100%	100%
2-year colleges								
Pell grants	216,936	− 6%	21%	31%	11%	26%	41%	12%
Supplemental grants	49,565	+ 3%	4%	5%	3%	4%	6%	3%
State grants	103,603	− 7%	8%	14%	2%	10%	17%	3%
Institutional grants*	73,118	+42%	8%	15%	1%	10%	19%	1%
Total need-based grants	165,530	+27%	14%	21%	7%	18%	28%	8%
National Direct Student Loans	50,740	−23%	3%	5%	2%	4%	5%	3%
Total loans**	403,532	+30%	25%	39%	10%	28%	42%	14%
Student earnings***	103,098	+ 1%	10%	14%	6%	12%	18%	7%
Total need-based aid	999,614	+11%	79%	97%	62%	95%	122%	68%
Total non-need-based aid	230,225	+12%	16%	28%	4%	19%	34%	4%
Total aid	1,280,020	+11%	100%	100%	100%	120%	131%	106%
Gross tuition and fees	1,146,836	+12%	85%	93%	76%	100%	100%	100%
All private institutions								
Pell grants	347,901	−10%	14%	20%	8%	13%	20%	6%
Supplemental grants	111,116	+ 1%	3%	5%	2%	3%	4%	2%
State grants	315,050	+ 1%	9%	15%	3%	8%	13%	2%
Institutional grants*	198,978	+24%	7%	11%	2%	5%	9%	1%
Total need-based grants	640,724	+16%	18%	26%	10%	13%	19%	7%
National Direct Student Loans	185,543	−18%	5%	7%	3%	4%	5%	2%
Total loans**	808,860	+21%	24%	37%	11%	19%	28%	9%
Student earnings***	226,396	− 1%	8%	11%	4%	7%	11%	3%
Total need-based aid	2,321,315	+ 8%	71%	85%	57%	59%	77%	42%
Total non-need-based aid	1,176,497	+29%	26%	39%	14%	20%	30%	9%
Total aid	3,636,286	+12%	100%	100%	100%	82%	97%	66%
Gross tuition and fees	5,503,880	+15%	140%	169%	110%	100%	100%	100%

Public institutions

	Average amount (b)	1-year change (c)	As per cent of all aid			As per cent of tuition (a)		
			Average (d)	High (e)	Low (f)	Average (d)	High (e)	Low (f)
Ph.D.-granting universities								
Pell grants	$ 3,435,016	− 5%	12%	15%	10%	15%	20%	10%
Supplemental grants	582,248	+ 4%	2%	3%	1%	2%	4%	1%
State grants	1,300,610	− 2%	3%	5%	1%	4%	6%	2%
Institutional grants*	688,557	+ 6%	3%	5%	0%	3%	5%	1%
Total need-based grants	1,699,178	+ 8%	5%	8%	3%	6%	8%	4%
National Direct Student Loans	1,341,944	−15%	5%	6%	3%	6%	8%	4%
Total loans**	9,380,320	+16%	29%	46%	13%	40%	69%	12%
Student earnings***	1,659,651	+ 1%	5%	7%	3%	6%	10%	3%
Total need-based aid	17,677,705	+ 7%	56%	73%	39%	74%	109%	39%
Total non-need-based aid	11,580,055	+13%	42%	59%	25%	50%	70%	30%
Total aid	29,955,305	+ 9%	100%	100%	100%	126%	155%	97%
Gross tuition and fees	25,273,693	+22%	87%	106%	68%	100%	100%	100%
Comprehensive institutions								
Pell grants	1,621,404	− 6%	30%	50%	9%	30%	42%	18%
Supplemental grants	208,402	+ 4%	3%	5%	0%	3%	6%	1%
State grants	553,877	+ 2%	5%	8%	1%	6%	11%	2%
Institutional grants*	257,441	+ 9%	3%	6%	0%	3%	4%	1%
Total need-based grants	510,020	+ 2%	5%	9%	1%	6%	11%	2%
National Direct Student Loans	428,966	−15%	5%	8%	2%	6%	10%	3%
Total loans**	2,136,967	+27%	21%	35%	6%	30%	58%	3%
Student earnings***	639,549	− 1%	10%	16%	3%	11%	19%	4%
Total need-based aid	5,364,250	+ 7%	60%	79%	40%	81%	121%	41%
Total non-need-based aid	4,953,917	+14%	39%	59%	19%	61%	102%	20%
Total aid	10,249,278	+10%	100%	100%	100%	142%	192%	92%
Gross tuition and fees	7,813,049	+17%	92%	137%	48%	100%	100%	100%
2-year colleges								
Pell grants	949,043	− 2%	38%	56%	20%	32%	46%	17%
Supplemental grants	118,523	− 7%	5%	10%	1%	4%	8%	1%
State grants	126,674	+ 1%	6%	9%	2%	5%	8%	2%
Institutional grants*	24,853	+ 6%	1%	3%	0%	1%	2%	0%
Total need-based grants	163,492	− 7%	6%	11%	2%	5%	9%	2%
National Direct Student Loans	74,347	−32%	3%	6%	0%	3%	5%	0%
Total loans**	545,800	+ 6%	19%	32%	5%	19%	35%	3%
Student earnings***	314,718	+ 7%	12%	20%	3%	11%	19%	2%
Total need-based aid	2,423,759	0%	74%	93%	55%	75%	110%	40%
Total non-need-based aid	780,763	+ 8%	25%	43%	7%	27%	51%	3%
Total aid	3,193,480	+ 2%	100%	100%	100%	102%	147%	56%
Gross tuition and fees	3,694,999	+12%	153%	241%	66%	100%	100%	100%
All public institutions								
Pell grants	1,347,533	− 3%	33%	51%	16%	30%	43%	17%
Supplemental grants	183,224	− 3%	4%	8%	1%	4%	7%	1%
State grants	345,862	+ 1%	5%	9%	2%	5%	9%	2%
Institutional grants*	145,626	+ 7%	2%	4%	0%	2%	3%	0%
Total need-based grants	391,006	− 3%	6%	10%	2%	6%	9%	2%
National Direct Student Loans	280,730	−26%	4%	6%	1%	4%	7%	1%
Total loans**	1,745,609	+12%	20%	34%	6%	24%	44%	4%
Student earnings***	519,756	+ 5%	11%	18%	3%	11%	18%	3%
Total need-based aid	4,565,126	+ 3%	69%	88%	50%	76%	113%	40%
Total non-need-based aid	2,851,226	+10%	30%	49%	12%	38%	66%	10%
Total aid	7,433,880	+ 5%	100%	100%	100%	115%	160%	70%
Gross tuition and fees	6,688,337	+14%	131%	201%	61%	100%	100%	100%

All institutions, public and private

	Average amount (b)	1-year change (c)	As per cent of all aid			As per cent of tuition (a)		
			Average (d)	High (e)	Low (f)	Average (d)	High (e)	Low (f)
Pell grants	$ 813,729	− 7%	23%	34%	11%	21%	31%	11%
Supplemental grants	144,718	− 1%	4%	6%	1%	3%	6%	1%
State grants	329,409	+ 1%	7%	12%	3%	7%	11%	2%
Institutional grants*	174,116	+16%	4%	8%	1%	3%	6%	1%
Total need-based grants	524,355	+ 7%	12%	19%	6%	10%	15%	5%
National Direct Student Loans	229,900	−22%	4%	7%	2%	4%	6%	2%
Total loans**	1,245,385	+17%	22%	36%	9%	21%	36%	7%
Student earnings***	363,102	+ 2%	9%	14%	4%	9%	15%	3%
Total need-based aid	3,366,931	+ 6%	70%	86%	53%	67%	94%	41%
Total non-need-based aid	1,956,921	+20%	28%	43%	13%	28%	47%	9%
Total aid	5,405,965	+ 9%	100%	100%	100%	97%	126%	68%
Gross tuition and fees	6,055,837	+14%	136%	184%	87%	100%	100%	100%

(a) Ratio of aid to gross tuition and fees may exceed 100 per cent in some instances because need for aid is based on room, board, and other costs as well as tuition.

(b) Average of amounts reported for fiscal year ending June 30, 1982.

(c) Change in average from fiscal 1981 to fiscal 1982.

(d) Average of the percentages reported by institutions in each category.

(e) About one-fifth of the institutions reported percentages higher than the "high" percentage (mean per cent plus one mean deviation).

(f) About one-fifth of the institutions reported percentages lower than the "low" percentage (mean per cent minus one mean deviation).

* From institutional funds restricted to use for student aid.

** Includes only institutionally administered loans; does not include guaranteed loans administered by off-campus lenders.

*** Includes work-study earnings and other institutionally administered employment funds.

Note: Totals include funds for which detail was not provided by some institutions.
Survey data are based on a stratified random sample of 150 public and 150 private colleges and universities. Technical inquiries about the survey design and sampling techniques should be addressed to John Minter Associates, P.O. Box 107, Boulder, Colo. 80306.

SOURCE: SURVEY FOR THE CHRONICLE BY JOHN MINTER ASSOCIATES

Aid to Students Increased Despite U.S. Cuts, Survey Finds

Colleges and universities have managed to increase financial aid to students during the past year, despite substantial reductions in federal funds, according to the Chronicle Survey.

Data based on reports from student-aid officials in a national sample of colleges and universities indicate an overall increase of 9 per cent in grants, loans, and other assistance administered by the institutions in 1981-82, compared with the previous year. During the same period, the amount of federal aid received through Pell Grants declined 7 per cent and the amount received through National Direct Student Loans declined 22 per cent, the survey found.

The reduction in federal loan funds did not deter the trend of students going increasingly into debt to pay for higher education.

The Chronicle Survey does not include most aid under the largest federal program, Guaranteed Student Loans, which is administered by off-campus lenders.

The survey did indicate that increases in loans administered by the colleges themselves were more than sufficient to offset the reduction in National Direct Student Loans. The net increase in loans administered by the institutions was 17 per cent. Such loans accounted for more than a fifth of all student aid.

Colleges increased by an average of 16 per cent the amount of grants made to students from institutional funds.

The increase in institutional grants was particularly strong at private institutions, with an average gain of 24 per cent, compared with 7 per cent at public institutions.

While student aid increased 9 per cent in 1981-82, institutional revenue from tuition and fees at all institutions increased 14 per cent.

The increases in tuition and aid were more closely matched at private institutions, where aid was up 12 per cent and tuition and fees were up 15 per cent. At public institutions, aid rose 5 per cent and tuition rose 14 per cent.

Private liberal-arts colleges with more selective admissions policies increased total student aid by 19 per cent, compared with an 18-per-cent increase in tuition revenue. Among private liberal-arts colleges that are less selective, student aid was up 11 per cent while tuition revenue rose 16 per cent.

The institutional category with the largest proportionate increase in tuition revenue was that of public Ph.D.-granting universities, where the average rose 22 per cent. Total student aid at those universities was up 9 per cent.

The reduction in federal funds from Pell Grants was more severe at private institutions than at public ones.

The average decline in Pell Grant funds was 10 per cent at private institutions and 3 per cent at public institutions.

For National Direct Student Loans the pattern was reversed, with private institutions reporting a decline of 18 per cent, compared with the public institutions' reduction of 26 per cent. Public two-year colleges reported a drop of 32 per cent in funds from National Direct Student Loans.

The survey was designed and conducted for *The Chronicle* by John Minter Associates, a research organization in Boulder, Colo., that specializes in higher-education studies.

The survey data were collected this fall from a stratified random sample of 150 public and 150 private colleges and universities.

—JACK MAGARRELL

College Housing for 24,000 Students Found Substandard

WASHINGTON

More than 24,000 students are living in substandard college housing, a national survey indicates.

The survey, sponsored by the Department of Education, defined substandard housing as that which fails to pass fire or health inspections; is structurally unsafe; has no usable flush toilets, bathtubs, or showers; or has insufficient hot and cold running water.

The students living in substandard college-operated housing in 1980-81 amounted to only 1 per cent of the estimated total of 2.4 million living in campus residences, the survey found. The proportion reported living in substandard conditions was twice as high at private institutions—1.4 per cent—as it was at public institutions—0.7 per cent.

Rehabilitation of housing facilities was given a high priority by the colleges and universities surveyed. Top priority for the next two years was given to rehabilitation by 40 per cent of the institutions; to energy-conservation projects by 29 per cent; to construction of new facilities by 21 per cent; and to other spending by 10 per cent.

Spending by colleges and universities on student housing in fiscal 1981 was estimated at $2.5-billion—an average of $1,078 per occupant.

In all, about 2,075 colleges and universities provide housing for students. At public institutions that provide such housing, an average of 32 per cent of students live there, compared with 53 per cent at private institutions.

At both public and private universities, the average student-housing occupancy rate exceeded the designed capacity of the facilities by 1 per cent. Occupancy at institutions other than universities, four-year and two-year, public and private, averaged about 95 per cent of capacity.

The monthly charges for college-owned housing in the fall of 1980 averaged $104 for single students and $162 for married students.

The survey was conducted for the Education Department by the American Council on Education. Data were obtained from 407 institutions that provide student housing. Copies of the survey report, *An Assessment of College Student Housing and Physical Plant*, are available from the Higher Education Panel, American Council on Education, One Dupont Circle, Washington 20036.

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Audio Features		
Sound Generator	YES	YES
Music Synthesizer	YES	NO
Hi-Fi Output	YES	NO
Video Features		
TV Output	YES	EXTRA
Input/Output Features		
"Smart" Peripherals	YES	NO
Software Features		
CP/M® Option	YES	YES

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CHE 12-8

International Notes

Israeli Professors Escalate Protests over Salaries

Faculty members at Israeli universities held a two-day nationwide strike last week after last-minute negotiations with the Ministry of Finance failed to resolve a conflict over salary increases.

Officials of the faculty union said that the professors would strike every day this week if their demands for a 30-per-cent increase are not met.

The union has demanded that the universities abide by the decision of an outside arbitrator who set the increase at 30 per cent. University officials have said that the arbitrator overstepped his authority and that they cannot provide the salary increases unless the Ministry of Finance increases university budgets.

The faculty members originally had scheduled a four-day strike last week but canceled those plans after Zevulun Hammer, the Minister of Education, announced that he would intervene in an effort to bring about a quick resolution of the conflict.

However, discussions between Mr. Hammer and officials at the Ministry of Finance failed to produce an offer acceptable to the union, and its leaders then called the two-day strike.

Canadian Professor Tried as Spy by British

Hugh Hambleton, a professor of economics at Laval University in Quebec, has gone on trial in Great Britain on charges of espionage. The British government claims that Mr. Hambleton had been passing classified documents to the Soviet Union for nearly 30 years.

It adds that he was considered important enough to warrant a private meeting in 1975 with Yuri Andropov, the new Soviet leader who was then head of the K.G.B., the Russian intelligence agency.

Although Canadian police uncovered decoding equipment in Mr. Hambleton's home in Quebec City in 1979, the Canadian government has maintained that it did not have enough evidence to prosecute him under the country's Official Secrets Act.

Mr. Hambleton, who holds both Canadian and British citizenship, has not denied that he dealt with Soviet officials, but claims that he gave them only unclassified material. He was arrested last June upon his arrival in London for a vacation.

British Faculty Union Censures U. of Aston

Britain's Association of University Teachers has called on its 35,000 members to boycott the University of Aston in Birmingham because the university has declared its intention to dismiss faculty members. Aston is the first British university to resort to dismissals as a result of spending cuts announced by the University Grants Committee in July, 1981.

The union acted after the university's governing council voted, 19 to 17, to authorize Vice-Chancellor Frederick Crawford to issue dismissal notices.

France

Continued from Preceding Page

such as Lyons and Rouen, many faculty members refused to hold classes. In others, they met their classes but used the opportunity to inform students of their grievances with the government.

At some universities, the strike was carried on to a second day. In Paris, several hundred junior faculty members from various campuses of the University of Paris held a demonstration in the main courtyard of the Sorbonne. Many of them complained about the need to protest in public against the actions of a Socialist government that had previously promised to meet many of the unions' demands.

Government officials appeared surprised at the extent of faculty support for the strike. Mr. Payan tried to defuse the conflict by describing the unions' reactions to his proposals as being based on a "misunderstanding." He said that the faculty unions generally had supported government proposals for reforms in other areas of higher education.

However, after the demonstration in Paris, the ministry announced that there would be further discussions of the reforms of the academic career structure, and that new proposals would be put forward "different from those which have just been announced."

West Bank

Continued from Preceding Page

tion against foreign faculty members whose visas are due to expire soon.

However, the authorities reportedly had summoned six such professors from Bethlehem University, including three Americans, to a meeting last week.

Meanwhile, in Amman, Jordan, King Hussein last week praised faculty members and students at the West Bank institutions for their "steadfastness" against the Israeli occupation. He was speaking at a conference of the P.L.O.'s Higher Council for Education and Culture.

In elections last week at An-Najah University on the West Bank, all nine seats on the student council were won by the United Student Front, a Palestinian nationalist organization that has generally supported the policies of Yasir Arafat, the P.L.O. leader.

FACT–FILE

Foreign Students in U.S. Institutions

Institutions with Largest Enrollment

Rank	Institution	Number of foreign students	Proportion of total enrollment
1.	Miami-Dade Community College	4,622	12.5%
2.	University of Southern California	3,434	12.4%
3.	Columbia University and Teachers College, and Barnard College	3,103	13.0%
4.	University of Wisconsin at Madison	2,519	6.0%
5.	Boston University	2,332	8.3%
6.	University of Texas at Austin	2,327	4.8%
7.	Texas Southern University	2,190	26.7%
8.	University of Michigan at Ann Arbor	2,187	6.1%
9.	University of California at Los Angeles	2,163	6.2%
10.	Northeastern University	2,110	5.0%
11.	George Washington University	2,014	9.4%
12.	New York University	2,004	6.0%
13.	University of Minnesota at Minneapolis-St. Paul	1,986	3.0%
14.	Southern Illinois University at Carbondale	1,982	8.3%
15.	State University of New York at Buffalo	1,977	8.2%
16.	Ohio State University, main campus	1,967	3.7%
17.	Harvard University	1,958	9.2%
18.	Massachusetts Institute of Technology	1,946	20.5%
19.	University of Miami	1,899	13.0%
20.	Indiana University at Bloomington	1,868	5.8%
21.	University of California at Berkeley	1,867	6.1%
22.	University of Southwestern Louisiana	1,845	11.9%
23.	Louisiana State University and A&M at Baton Rouge	1,828	6.0%
24.	University of Pennsylvania	1,807	8.1%
25.	Oklahoma State University, main campus	1,775	7.8%
26.	University of Houston, central campus	1,757	6.2%
27.	University of Florida	1,739	5.1%
28.	Stanford University	1,739	12.8%
29.	University of Pittsburgh, main campus	1,685	5.8%
30.	University of San Francisco	1,680	29.5%
31.	Iowa State University	1,667	6.8%
32.	University of Kansas	1,642	6.8%
33.	University of Oklahoma at Norman	1,634	7.5%
34.	North Texas State University	1,626	9.3%
35.	California State University at Los Angeles	1,619	7.1%
36.	American University	1,610	13.4%
37.	University of Illinois at Urbana-Champaign	1,608	4.6%
38.	Howard University	1,583	12.6%
39.	Texas A&M University, main campus	1,559	4.4%
40.	Michigan State University	1,502	3.3%
41.	University of Arizona	1,454	4.6%
42.	Brigham Young University, main campus	1,453	4.8%
43.	University of Missouri at Columbia	1,427	5.7%
44.	University of Maryland at College Park	1,417	3.8%
45.	Ohio University, main campus	1,392	8.9%
46.	University of Washington	1,377	3.9%
47.	Cornell University	1,342	7.8%
48.	Pennsylvania State University, main campus	1,335	3.6%
49.	University of Texas at Arlington	1,300	6.2%
50.	Purdue University, main campus	1,281	3.9%
51.	California State University at Fresno	1,277	7.8%
52.	University of Hawaii at Manoa	1,276	6.2%
53.	University of Iowa	1,253	4.6%
54.	University of Illinois at Chicago Circle	1,201	5.8%
55.	California State University at Long Beach	1,174	3.3%
56.	Arizona State University	1,162	3.1%
57.	Syracuse University, main campus	1,151	5.4%
58.	University of Toledo	1,150	5.4%
59.	Florida International University	1,136	9.9%
60.	University of Texas at El Paso	1,134	7.4%
61.	Wayne State University	1,122	3.6%
62.	Central State University (Okla.)	1,120	9.4%
63.	Utah State University	1,118	10.9%
64.	San Diego State University	1,080	3.0%
65.	State University of New York at Stony Brook	1,076	7.6%
66.	San Jose State University	1,064	4.1%
67.	United States International University	1,047	43.6%
68.	University of Oregon, main campus	1,041	6.2%
69.	Georgetown University	1,028	8.4%
70.	Portland State University	1,028	8.4%

Distribution by Field of Study

Field of study	1979-1980		1981-1982	
	Number of foreign students	Proportion of foreign students	Number of foreign students	Proportion of foreign students
Agriculture	8,750	3.1%	8,880	2.7%
Allied health	2,270	0.8%	3,090	1.0%
Architecture & environmental design	5,760	2.0%	6,340	1.9%
Area & ethnic studies	1,510	0.5%	2,280	0.7%
Business	48,370	16.9%	59,420	18.2%
Communications	2,790	1.0%	5,340	1.7%
Computer & information sciences	8,610	3.0%	15,690	4.8%
Construction trades	—	—	1,570	0.5%
Education	12,340	4.3%	12,410	3.8%
Engineering	66,090	23.1%	62,300	19.1%
Engineering related technologies	10,860	3.8%	11,350	3.5%
English language	12,170	4.2%	14,700	4.5%
Foreign languages	2,560	0.9%	3,150	1.0%
Health sciences	8,680	3.0%	8,480	2.6%
Home economics	1,550	0.5%	2,680	0.8%
Industrial arts	—	—	520	0.2%
Interdisciplinary studies	6,590	2.3%	4,280	1.3%
Law	1,080	0.4%	1,790	0.5%
Letters	5,070	1.8%	6,300	1.9%
Liberal & general studies	—	—	5,530	1.7%
Library & archival sciences	590	0.2%	630	0.2%
Life sciences	9,100	3.2%	9,550	2.9%
Mathematics	5,370	1.9%	6,930	2.1%
Military technologies	—	—	210	0.1%
Parks & recreation	—	—	110	—
Personal & social development †	—	—	290	0.1%
Philosophy & religion	—	—	610	0.2%
Physical sciences	11,030	3.8%	14,190	4.4%
Protective services	—	—	430	0.1%
Psychology	2,740	1.0%	3,340	1.0%
Public affairs	3,730	1.3%	2,900	0.9%
Science technologies	1,750	0.6%	1,130	0.3%
Social sciences	14,550	5.1%	16,140	5.0%
Theology	3,710	1.3%	2,750	0.8%
Visual & performing arts	8,590	3.0%	8,330	2.6%
Undeclared	20,130	7.0%	22,660	6.9%
Total	**286,340**	**100.0%**	**326,300**	**100.0%**

Where They Come From

Rank	Country or territory	Students	Rank	Country or territory	Students
1.	Iran	35,860	26.	France	2,990
2.	Taiwan	20,520	27.	Turkey	2,940
3.	Nigeria	19,560	28.	Libya	2,900
4.	Canada	14,950	29.	Brazil	2,820
5.	Japan	14,020	30.	Israel	2,550
6.	Venezuela	13,960	31.	Jamaica	2,430
7.	India	11,250	32.	Cuba	2,220
8.	Saudi Arabia	10,220	33.	Panama	2,160
9.	Malaysia	9,420	34.	Kenya	2,090
10.	Hong Kong	8,990	35.	Egypt	2,080
11.	Republic of Korea	8,070	36.	Peru	1,850
12.	Mexico	7,890	37.	Singapore	1,840
13.	Lebanon	6,800	38.	Ghana	1,830
14.	Thailand	6,730	39.	Ethiopia	1,760
15.	Jordan	6,180	40.	Bangladesh	1,610
16.	United Kingdom	5,540	41.	Iraq	1,600
17.	Vietnam	4,940	42.	Australia	1,550
18.	China	4,360	43.	El Salvador	1,550
19.	Colombia	4,310	44.	Trinidad & Tobago	1,490
20.	Greece	4,220	45.	Italy	1,450
21.	Indonesia	4,070	46.	Pacific Islands	1,450
22.	West Germany	3,640	47.	Netherlands	1,380
23.	Pakistan	3,500	48.	Argentina	1,340
24.	Philippines	3,410	49.	South Africa	1,330
25.	Kuwait	3,330	50.	Ecuador	1,310

† Includes basic skills, citizenship & civic activities, health-related activities, interpersonal skills, leisure & recreational activities, and personal awareness.

SOURCE: INSTITUTE OF INTERNATIONAL EDUCATION

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News Summary

Articles on inside pages

The Chronicle will not be published in the next two weeks. The next issue, dated January 5, will be mailed December 31.

Hanly Funderburk, president of Auburn University, is under fire from his faculty and has less than a month to rescue his administration. Story on Page 6.

The presidents of public colleges and universities are feeling the financial crunch in higher education much more than their counterparts at private institutions. Chronicle Survey on Page 8.

Research libraries are facing a troubled future, and graduate deans have been slow to take note of the problem. Story on Page 10.

Statistics on the enrollment of minority-group students at more than 2,900 U.S. colleges and universities have been released by the Department of Education. Fact-File begins on Page 12.

Congress may soon pass an appropriations bill for education and health programs—for the first time in four years. Story on Page 19.

Scholars and scientists have begun to view the creationists as a serious intellectual threat, and are debating them in the pages of recent books. Story on Page 33.

A federal contract to conduct high-school and basic-skills classes for American soldiers in Europe has become a source of controversy. Story on Page 25.

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'TIS THE SEASON

SCOTT HOLM

As finals approach, a student makes appropriate use of the University of Iowa's main library.

Rights Unit Hits Reagan's Plans to Cut Education

Commission fears effects on 'least privileged'

By CHARLES S. FARRELL

WASHINGTON

The U.S. Commission on Civil Rights last week assailed the Reagan Administration for proposed budget cuts in education that it said would "undermine the fragile gains made by the least privileged in our society."

In a report on the federal education budget for fiscal year 1983, the commission analyzed a number of the Reagan Administration's proposed budget reductions and program changes. One effect, the commission said, will be more competition at the state level for less money.

Cited in the report were Administration proposals to decrease financial assistance to students by almost one-third, from $6.4-billion in 1981 to $4.3-billion in 1983. Pell grants, of which members of minority groups and women make up the majority of the recipients, would sustain the largest cut, $1.2-billion.

Proposed Cuts 'Devastating'

Congress, however, has refused to go along with the Administration's proposals and seems unlikely to make any significant reductions in the Education Department's 1983 budget. But Commissioner Mary Frances Berry said that even the proposing of cuts causes educational disruptions because of the uncertainty it creates.

"It absolutely is devastating when you're trying to improve education on a local level," she said.

The commission also noted that enrollment at traditionally black institutions is already slipping and that without more federal aid, it will drop further and "weaken the continuing development of these colleges and universities."

The United Negro College Fund recently reported that enrollment at the 42 private black colleges and universities it supports was down 4 per cent over a year ago, to about 43,000 students.

Leonard L. Haynes, III, director of the Office for the Advancement of Public Ne-

Continued on Page 22, Column 1

Creationism Debate: Next Round May Be in Local School Boards

Anthropologists hope for quick response from academics

By CHERYL M. FIELDS

WASHINGTON

Creationists may turn their attention to local school boards now that federal judges in Arkansas and Louisiana have struck down state laws requiring that the Biblical version of creation be taught in public schools, some anthropologists predict.

"I think further statewide challenges to the teaching of evolution probably will not occur because of the losses in the legal arenas," said Eugenie Scott, an anthropologist at the University of Kentucky. "But I see a lot of organization at the local level, and I think that's where the next pressure will be: on local school boards."

Such pressure will require a quick response from academics and community leaders who don't want creationism given "equal time" with scientific theories of evolution in the public schools, Ms. Scott said.

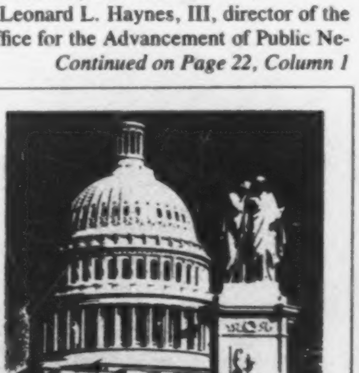
"But you can win such fights if you organize early and work hard," she said at a symposium on "creationism and the classroom" at the annual meeting here last week of the American Anthropological As-

Continued on Page 10, Column 1

A Special Guide to Washington

Washington, D.C., is a prime site for scholarly meetings, large and small. The city offers visitors from academe access to a wide range of government agencies and professional organizations—plus many educational and cultural attractions.

A guide to the capital appears in the "Personal & Professional" section, Page 27.



'Great Pessimism' Voiced by Chiefs of Public Colleges

By JACK MAGARRELL

CHRONICLE SURVEY

How College Presidents Say Their Institutions Are Doing

Financially

Public institutions	Gaining ground	Holding their own	Losing ground
Universities	17%	17%	67%
Other 4-year colleges	26%	26%	48%
2-year colleges	12%	48%	39%
All public institutions	16%	40%	44%
Private institutions			
Universities*	45%	45%	9%
Liberal-arts colleges			
Selective	79%	17%	4%
Less selective	44%	56%	0%
2-year colleges	71%	29%	0%
All private institutions	55%	43%	2%
All institutions	37%	42%	22%

Academically

Public institutions	Gaining ground	Holding their own	Losing ground
Universities	50%	44%	6%
Other 4-year colleges	74%	26%	0%
2-year colleges	64%	33%	3%
All public institutions	65%	32%	2%
Private institutions			
Universities*	67%	30%	3%
Liberal-arts colleges			
Selective	79%	17%	0%
Less selective	72%	24%	4%
2-year colleges	100%	0%	0%
All private institutions	78%	19%	2%
All institutions	72%	25%	2%

In student services

Public institutions	Gaining ground	Holding their own	Losing ground
Universities	33%	61%	6%
Other 4-year colleges	30%	57%	13%
2-year colleges	48%	45%	6%
All public institutions	42%	50%	8%
Private institutions			
Universities*	52%	42%	6%
Liberal-arts colleges			
Selective	63%	33%	0%
Less selective	80%	20%	0%
2-year colleges	86%	14%	0%
All private institutions	74%	24%	1%
All institutions	59%	36%	4%

Note: Survey data are based on a stratified random sample of college and university presidents at 74 public institutions and 89 private institutions.

Technical inquiries about the survey design and sampling techniques should be addressed to John Minter Associates, P.O. Box 107, Boulder, Colo. 80306.

SOURCE: SURVEY FOR THE CHRONICLE BY JOHN MINTER ASSOCIATES

The financial problems of higher education are being felt much more strongly by presidents of public colleges and universities than by the heads of private institutions, the Chronicle Survey has found.

When a representative sample of college and university presidents was asked to assess recent trends in the financial condition of their institutions, 44 per cent of those in the public sector said they were losing ground.

In contrast, only 2 per cent of the presidents of private colleges and universities said their institutions were not holding their own.

John P. Mallan, vice-president of the American Association of State Colleges and Universities, said the survey results reflected "very great pessimism" among the public institutions, due primarily to economic problems of the states.

Economic hard times have had a more immediate effect on state appropriations, on which the public institutions rely, while the full effect of cuts in federal student-aid programs, which may hit private institutions harder, have yet to be felt, Mr. Mallan said.

The survey found that the private sector contained not only fewer pessimists but more outright optimists.

Fifty-five per cent of the presidents of private colleges and universities said their institutions were gaining ground financially. Only 16 per cent of the presidents of public institutions could say the same.

The heads of 40 per cent of the public institutions and 43 per cent of the private institutions said their colleges and universities were "holding their own" financially.

"Of course the presidents of independent colleges and universities are optimistic about the future," said John D. Phillips, president of the National Association of Independent Colleges and Universities. "Wouldn't you be, if after more than three decades of continual danger that the relentless tide of governmental growth would swamp your private enterprise, things turn around so that the American public begins to appreciate the value and the importance of private-sector alternatives to governmental monopolies in the provision of research, teaching, and educational service?"

Mr. Phillips said the optimism of the top officials of private colleges was "tempered by growing concern" over reductions in government assistance to students.

He also acknowledged that part of the optimism among presidents of private colleges and univerities might be due to an occupational predisposition. "If you're out there scrambling to raise funds—in tuition, gifts, and grants—you almost have to be optimistic," he said.

The optimism persisted at private institutions despite a reported decline of 1.5 per cent in enrollment at private instituions this fall, compared with a year ago. At public institutions, enrollment was reported up a fraction of a per cent.

The reported decline in freshman enrollment was particularly strong at the less selective liberal-arts colleges. That same category of private institution produced less optimism than other types. Presidents of 44 per cent of the less selective colleges reported they were gaining ground financially, compared with 79 per cent at the more selective colleges, 71 per cent at the private two-year colleges, and 45 per cent at the private universities.

Only 12 per cent of the public two-year colleges were described by their presidents as gaining ground financially.

Two-thirds of the public universities reported they were losing ground financially, while only 17 per cent of them reported they were gaining ground.

Robert L. Clodius, president of the National Association of State Universities and Land-Grant Colleges, expressed no surprise at the fact that so many public universities were described as losing ground financially. He did seem doubtful that as many as 17 per cent could be gaining.

"All the universities I know of have problems with their legislatures," he said.

For the 50 states combined, appropriations for higher education for the current year are 6 per cent higher than they were a year ago, according to a survey by M. M. Chambers of Illinois State University. It was the smallest one-year increase in more than 20 years.

Presidents of 72 per cent of the institutions surveyed said their institutions were gaining ground in academic quality, and 59 per cent said their institutions were improving their services to students.

When the presidents were asked how they thought their institutions would fare during the next five years, 30 per cent said they expected substantial improvement, 56 per cent expected a little improvement.

Presidents' 5-Year Outlook for Their Institutions

Public institutions	Will improve substantially	Will improve a little	Will not change	Will slip a bit	Will deteriorate seriously
Universities	22%	72%	0%	6%	0%
Other 4-year colleges ...	26%	48%	9%	13%	4%
2-year colleges	21%	64%	0%	12%	3%
All public institutions ...	23%	60%	2%	12%	3%
Private institutions					
Universities	45%	30%	9%	15%	0%
Liberal-arts colleges					
Selective	42%	50%	4%	4%	0%
Less selective	36%	60%	4%	0%	0%
2-year colleges	29%	57%	0%	14%	0%
All private institutions ...	37%	53%	4%	6%	0%
All institutions	30%	56%	3%	9%	1%

SOURCE: SURVEY FOR THE CHRONICLE BY JOHN MINTER ASSOCIATES

President in Jeopardy in the Politicizing of Auburn University

Continued from Preceding Page

decisions made elsewhere—has become more involved in the running of the university.

The president's friends also claim that his enemies are fewer than they appear. "Dr. Funderburk is being harassed by one faction of the faculty," says Ms. French. "It's a powerful faction—it controls the senate. And any faculty member who wants to support the president is accused of lacking principles."

One engineering professor, who asked not to be identified, said there were "strong elements of bandwagon psychology" in the faculty's second no-confidence vote. S. Allen Edgar, a professor of poultry science, says "younger people were pressured" into voting against the president.

Mr. Edgar also touches on a theme that has played—sometimes softly and sometimes loudly—on Auburn's campus for years: the tension between the agricultural and engineering interests traditional to land-grant colleges such as Auburn and the comprehensive-university interests that have come with expansion. Mr. Funderburk's background as a plant physiologist places him, in the eyes of many here, squarely in the "Ag Hill" camp.

"There's been a shift away from support of engineering and agriculture in recent years," Mr. Edgar says. "They must remain strong if we are to carry out the traditional mission of this university.

"I think most of the people in agriculture feel the same way I do."

Winfred A. Shaw, a professor of mechanical engineering who sides with Mr. Edgar, says the president has been "looked on very well in the mechanical-engineering faculty" ever since he settled a dispute in the engineering department "that now looks like it was caused by Cox and Littleton." Mr. Shaw made an appointment with Mr. Funderburk once himself, he says, and found him "open and understanding—a man of integrity and intellect."

But Curtis M. Peterson, an associate professor of botany, plant pathology, and microbiology who is president-elect of the senate, says the university is "facing a leadership vacuum. This is a mood that is reflected in every school. The faculty is *not* divided. I, and many other faculty members in agriculture, don't want this idea promoted that a large constituency in agriculture supports Funderburk, because that's a misleading statement."

Although Auburn's students seem not to be taking sides, most of the alumni support Mr. Funderburk, according to Mr. Bradberry, the alumni association's executive secretary. "I would guess that 80 per cent of the alumni, even at this point in time, would be pulling for Dr. Funderburk and would be critical of the general faculty," he says. The chaos on the campus, he notes, has not affected a money-raising campaign initiated by Mr. Funderburk; it has so far collected more than $35-million.

But, Mr. Bradberry says, "I've been concerned by a movement among some alumni to pit the alumni association against the faculty—seeing faculty members as being in a collective-bargaining situation and moving toward unionization."

Indeed, there has been some talk among rebellious faculty members about unions—talk that borders on heresy in this part of the world. The senate's Mr. Peterson says he doesn't see a union as the answer yet, but Allen W. Jones, the university archivist and a professor of history, disagrees. "If the trustees don't fire Funderburk," Mr. Jones says, "what's going to happen before this is all over is that we're all going to get sick for a week—the whole damn faculty. We're going to strike and we're going to form a union."

■

"Dr. Funderburk is not a public man," says one Samford Hall observer—touching on what some see as one of the president's most serious shortcomings. "One on one, he's warm and personable and easy to chat with, but in public, he's not Ted Hesburgh [The Rev. Theodore M. Hesburgh, president of the University of Notre Dame]."

"The faculty, for whatever reason, is having a problem seeing Dr. Funderburk as a real great leader," says the alumni association's Mr. Bradberry, who came to Auburn more than 30 years ago as a backfield coach for the football team. "I think a president can withstand external forces as long as the internal forces are with him, but we've reached the point where even his deans and some of his vice-presidents are asking whether he should step down. We've come to a point where it's so critical that some kind of settlement is a must."

Mr. Funderburk's supporters, who have watched with something approaching incredulity as his standing with the trustees has been steadily eroded, don't say much now about his prospects. On the other hand, many of his adversaries believe, as Mr. Peterson told reporters after the trustees' meeting, "It's only a matter of time until we have new leadership. It's just a question of how much more pain everyone's willing to go through."

FACT-FILE

Undergraduate Enrollment, by Race, at

WASHINGTON

Following are newly compiled data on undergraduate enrollments of black, white, American Indian, Asian. and Hispanic students at more than 2,900 U. S. colleges and universities in fall, 1980, expressed as a percentage of the total undergraduate enrollment at each institution.

The figures, provided to *The Chronicle* this month by the Department of Education's Office for Civil Rights, include both full-time and part-time students but do not include nonresident aliens, so percentages at an institution may not total 100.

	American Indian	Black	Asian	Hispanic	White
ALABAMA					
Alabama A&M U	0.2	75.1	5.8	0.1	4.6
Alabama Christian C	0.0	57.0	0.0	0.0	41.5
Alabama Lutheran					
Acad & C	0.0	96.3	0.0	0.0	0.0
Alabama St U	0.0	99.5	0.0	0.1	0.1
Alexander City St JC	0.3	27.0	0.0	0.2	72.1
Athens St C	0.2	5.5	0.2	0.4	92.9
Auburn U					
Main Campus	0.1	2.0	0.2	0.3	96.9
Montgomery	0.2	13.7	0.3	0.2	85.6
Birmingham Southern C	0.0	11.1	0.6	0.3	86.3
B T Washington					
Business C	0.0	99.5	0.0	0.0	0.5
Brewer St JC	0.0	19.5	0.0	0.0	80.5
Chattahoochee					
Valley CC	0.3	31.3	0.0	0.4	67.1
Enterprise St JC	0.5	10.4	0.8	1.2	87.0
Faulkner St JC	0.0	19.2	0.3	0.3	79.4
Gadsden St JC	0.3	14.0	0.0	0.5	82.4
George Wallace St CC					
Dothan	0.4	11.4	0.2	0.5	87.3
Selma	0.0	33.8	0.0	0.0	66.2
Huntingdon C	0.0	8.3	0.2	0.5	88.9
Jacksonville St U	0.1	14.3	1.1	0.7	83.7
Jefferson Davis St JC	0.4	27.2	0.0	0.0	72.5
Jefferson St JC	0.2	16.6	0.2	0.1	81.9
John C Calhoun St CC	0.1	10.5	0.2	0.2	88.0
Judson C	0.0	3.0	0.0	0.0	96.4
Lawson St CC	0.0	99.1	0.0	0.0	0.2
Livingston U	0.0	29.2	2.3	0.0	67.4
Lomax-Hannon JC	0.0	100.0	0.0	0.0	0.0
Lurleen Wallace St JC	0.0	19.9	0.0	0.0	79.3
Marion Military Inst	0.0	12.1	0.4	0.4	86.0
Miles C	0.0	100.0	0.0	0.0	0.0
Mobile C	0.2	13.2	0.2	0.4	86.0
NE Alabama St JC	0.1	2.9	0.1	0.2	96.6
NW Alabama St JC	0.0	8.9	0.0	0.0	91.1
Oakwood C	0.0	80.0	0.0	0.0	0.1
Patrick Henry St JC	0.0	23.6	0.0	0.0	76.4
S D Bishop St JC	0.3	80.8	0.2	0.3	15.0
Samford U	0.2	6.7	0.3	0.1	92.1
Selma U	0.0	100.0	0.0	0.0	0.0
Shelton St CC	0.0	22.9	0.1	0.1	76.9
Snead St JC	0.2	2.4	0.0	0.0	97.3
Southeastern Bible C	0.0	0.8	0.0	0.0	98.3
Southern JC of Business	0.0	89.8	0.0	0.0	10.2
Southern Union St JC	0.0	17.4	0.0	0.0	82.6
Spring Hill C	0.1	4.0	0.2	1.9	92.4
Stillman C	0.0	98.9	0.0	0.2	0.0
Talladega C	0.0	98.9	0.0	0.0	1.1
Troy St U					
Main Campus	0.2	15.9	0.3	1.0	82.1
Dothan-Ft Rucker	0.3	12.0	1.0	1.9	84.7
Montgomery	0.3	29.2	0.6	1.2	68.3
Tuskegee Inst	0.0	88.8	0.0	0.6	0.2
U of Alabama					
Tuscaloosa	0.0	12.0	0.2	0.9	85.9
Birmingham	0.2	21.3	0.6	0.3	76.7
Huntsville	0.2	4.5	1.1	1.0	92.4
U of Montevallo	0.2	6.5	0.0	0.0	91.7
U of N Alabama	0.1	8.0	0.2	0.2	91.4
U of S Alabama	0.5	9.9	0.2	0.5	85.4
Walker C	0.0	7.9	0.0	1.2	91.0
Wallace St CC	0.0	2.2	0.0	0.0	97.8
ALASKA					
Alaska Bible C	15.6	6.3	0.0	0.0	78.1
Alaska Pacific U	24.0	5.8	2.9	2.4	52.4
Sheldon Jackson C	64.5	0.0	0.9	0.0	33.6
U of Alaska					
Anchorage CC	2.7	3.5	1.1	1.2	91.5
Fairbanks	7.8	1.6	0.9	0.5	87.1
Juneau	11.7	1.1	2.4	1.1	83.6
Kenai CC	0.0	0.0	0.0	0.0	100.0
Ketchikan CC	8.8	0.3	0.8	1.8	88.4
Kodiak CC	4.5	0.6	0.8	0.4	92.0
Kuskokwim CC	68.5	1.5	0.0	1.5	26.1
Northwest CC	39.8	0.0	2.2	1.1	57.0
Matanuska-Susitna CC	1.7	0.7	0.2	0.5	95.8
Sitka CC	22.3	0.6	2.2	1.1	73.8
Tanana Valley CC	7.1	2.3	1.8	1.0	87.8
ARIZONA					
Arizona C of the Bible	0.0	1.8	2.8	6.4	86.2
Arizona St U	1.0	2.5	1.2	4.4	87.0
Arizona Western C	2.6	4.3	0.9	21.8	70.3
Central Arizona C	8.2	3.6	0.4	16.2	71.7
Cochise C	0.6	4.0	4.0	16.2	71.5
C of Ganado	99.1	0.0	0.0	0.0	0.9
Devry Inst of Tech	0.8	4.4	1.8	4.0	88.9
Eastern Arizona C	6.3	3.3	0.5	16.6	67.9
Grand Canyon C	3.5	4.3	0.7	2.6	87.2
Glendale CC	0.8	2.8	1.8	8.8	86.4
Maricopa Tech CC	3.9	9.9	1.0	15.1	70.0
Mesa CC	1.5	2.4	1.3	7.3	87.0
Phoenix C	2.9	5.7	1.4	9.2	79.9
Rio Salado C	1.2	1.9	2.3	4.6	89.9
Scottsdale CC	1.9	1.2	1.2	1.8	93.8
S Mountain CC	1.2	[illegible]	1.5	33.2	28.5
Mohave CC	1.8	0.1	0.4	2.2	95.8
Navajo CC	98.4	0.6	0.3	0.2	0.5
N Arizona U	4.9	1.3	0.5	5.2	86.6
Northland Pioneer C	24.2	0.7	0.5	3.1	71.5
Pima CC	2.3	4.0	1.7	18.2	72.8
Prescott Center C	2.0	0.0	0.0	0.0	94.0
SW Baptist Bible C	3.3	0.5	1.1	2.7	89.0
U of Arizona	0.9	1.3	1.0	4.8	89.3
ARIZONA—Continued					
U of Phoenix	1.2	3.9	1.2	4.3	89.4
Western International U	2.6	11.7	3.9	5.2	67.5
Yavapai C	8.7	1.6	0.2	6.7	82.3
ARKANSAS					
American C of Commerce	2.7	3.6	0.2	0.2	93.0
Arkansas Baptist C	0.0	96.4	0.0	0.0	3.6
Arkansas C	0.2	7.9	0.0	0.2	91.5
Arkansas C of Tech	0.3	24.3	0.0	0.3	75.0
Arkansas St U					
Main Campus	0.8	12.2	0.3	0.3	86.2
Beebe Branch	0.0	8.8	0.2	0.0	91.1
Arkansas Tech U	0.9	3.9	0.2	0.3	94.1
Capital City JC	0.0	54.7	0.0	0.0	45.3
Central Baptist C	0.0	1.5	0.0	0.0	98.1
C of the Ozarks	0.0	6.1	14.9	0.5	78.4
Crowley's Ridge C	0.0	5.1	0.0	0.0	94.9
E Arkansas CC	0.0	32.4	0.6	0.0	67.0
Garland County CC	0.7	7.4	1.2	0.6	89.6
Harding U-main campus	0.2	0.9	0.1	0.2	98.9
Henderson St U	0.4	20.0	0.2	0.3	78.6
Hendrix C	0.0	4.6	0.1	0.4	94.3
John Brown U	1.2	1.2	0.3	0.4	95.3
Mississippi County CC	0.0	16.1	1.6	1.6	80.6
N Arkansas CC	0.2	0.0	0.0	0.0	99.8
Ouachita Baptist U	0.0	6.7	0.5	0.0	91.6
Philander Smith C	0.0	73.6	0.0	0.0	1.1
Phillips County CC	2.5	45.5	0.3	0.3	51.4
Shorter C	0.0	95.7	0.0	0.0	3.1
Southern Arkansas U					
Main Campus	0.2	23.3	0.2	0.1	75.7
El Dorado Branch	0.4	29.5	0.2	0.0	69.9
Tech Branch	0.2	24.7	0.5	0.3	74.3
Southern Baptist C	0.5	5.9	0.0	0.3	90.6
U of Arkansas					
Main Campus	0.7	5.7	0.7	0.4	90.3
Little Rock	1.6	14.4	0.7	0.3	82.9
Medical Science	0.3	5.6	1.5	0.0	92.3
Monticello	0.5	18.9	0.2	0.2	80.2
Pine Bluff	0.1	84.8	0.2	0.0	12.3
U of Central Arkansas	0.0	13.1	0.0	0.0	86.6
Westark CC	1.3	4.2	2.2	0.2	90.3
CALIFORNIA					
Allan Hancock C	2.7	5.4	4.0	14.5	72.9
American Acad					
of Dramatic Art	0.0	7.0	0.4	3.7	77.0
Antelope Valley C	1.6	5.8	2.4	6.7	82.6
Armstrong C	0.8	15.2	1.5	0.0	15.2
Art Center C of Design	0.6	1.0	6.9	3.1	78.1
Azusa Pacific C	0.2	6.9	3.3	5.7	74.0
Bakersfield C	2.2	7.3	2.9	16.0	70.9
Barstow C	2.4	9.4	0.3	15.2	65.8
Bauder C of					
Career Education	0.7	23.4	4.0	8.5	63.2
Bay-Valley Tech	0.6	4.8	45.1	15.4	33.6
Bethany Bible C	0.0	1.6	1.8	8.5	86.5
Biola C	0.5	2.1	3.1	2.8	89.2
Brooks C	1.5	14.3	3.0	3.1	74.0
Butte C	1.4	1.1	0.9	3.7	92.2
Cabrillo C	1.2	1.0	3.0	6.9	85.6
California Baptist C	1.1	4.7	2.8	3.5	83.8
California Christian C	0.0	6.7	0.0	6.7	86.7
California C of Arts					
& Crafts	2.0	4.9	8.0	6.3	66.1
California Inst of Arts	1.0	7.3	3.2	5.5	77.7
California Inst of Tech	1.1	1.9	11.9	3.7	74.5
California Lutheran C	0.4	5.1	1.5	3.9	86.2
California Maritime Acad	0.0	1.6	5.0	4.4	85.6
California St C					
Bakersfield	3.3	7.3	3.4	13.0	70.8
San Bernardino	2.4	14.5	3.3	20.2	58.3
Stanislaus	1.7	5.7	3.0	9.4	78.4
California Poly St U					
San Luis Obispo	1.0	1.6	4.9	4.0	87.8
Pomona	1.4	3.9	10.3	11.6	69.0
California St U					
Chico	0.8	2.0	2.1	4.1	87.8
Dominguez Hills	1.5	40.9	9.0	8.8	37.0
Fresno	1.4	3.8	5.7	12.3	69.2
Fullerton	0.7	3.3	5.9	9.2	79.2
Hayward	2.0	14.6	11.8	6.9	62.5
Long Beach	1.2	9.6	11.7	9.0	65.9
Los Angeles	0.7	15.1	21.6	28.0	30.5
Northridge	0.9	6.9	7.6	9.0	72.9
Sacramento	1.8	6.5	8.5	5.8	72.6
Humboldt St U	2.2	0.7	2.3	3.1	91.0
San Diego St U	1.4	4.3	5.5	7.7	78.3
San Francisco St U	1.3	10.4	21.7	7.0	56.5
San Jose St U	1.9	7.7	13.9	8.7	64.2
Sonoma	1.5	4.9	2.8	4.7	83.6
Center for Early Ed	0.0	36.8	0.0	5.3	52.6
Cerritos C	1.5	5.3	3.0	15.9	62.0
Cerro Coso CC	1.9	7.1	3.1	3.0	84.7
Chabot C	2.7	6.8	8.9	8.9	72.5
Chaffey C	1.9	4.3	1.6	14.9	76.2
Chapman C	1.2	4.5	5.6	4.5	77.9
Christ C Irvine	0.6	1.9	1.2	0.6	[illegible]
Christian Heritage C	0.8	0.3	1.1	2.4	92.8
Citrus C	1.3	3.7	2.8	11.1	67.4
Claremont C's					
Claremont Men's C	0.1	1.8	7.9	3.0	83.8
Harvey Mudd C	0.2	0.8	21.4	2.2	69.2
Pitzer C	0.0	7.7	3.9	6.8	79.0
Pomona C	0.0	2.3	10.3	5.7	79.2
Scripps C	0.0	2.8	5.1	5.5	82.0
Coast CC District					
Coastline CC	1.0	0.8	3.0	3.5	91.3
Golden West C	1.7	1.2	5.8	6.5	83.4
Orange Coast C	2.9	1.2	5.5	6.0	81.0
Cogswell C	0.6	6.6	11.8	6.8	28.1
Coleman C	0.0	2.3	6.1	4.8	86.7
C of the Canyons	1.4	2.1	1.3	4.6	86.2
C of the Desert	0.9	4.1	1.4	14.9	77.5
C of Marin	1.1	3.9	2.8	3.0	86.8
C of Notre Dame	0.5	6.0	6.3	5.1	60.6
C of Redwoods	3.7	0.7	0.8	2.5	90.5
C of Sequoias	2.8	3.6	1.6	10.6	69.4
C of Siskiyous	3.1	3.3	0.2	3.4	88.4
Columbia C	0.7	0.3	0.3	1.4	97.2
Hollywood	1.4	12.9	2.7	8.2	38.1
Compton CC	0.4	78.1	1.7	5.5	3.4
Contra Costa CC					
Contra Costa C	1.2	27.5	7.8	8.0	55.5
Diablo Valley C	1.0	2.3	3.6	3.6	89.2
Los Medanos C	1.3	8.8	2.9	10.4	76.8
Crafton Hills C	1.1	2.1	1.7	8.0	86.8
Cuesta C	1.4	1.3	3.9	5.3	87.5
Cuyamaca C	2.1	1.3	3.2	6.2	86.1
CALIFORNIA—Continued					
Cypress C	1.4	1.8	5.5	7.8	82.8
D-Q U	73.5	0.0	0.0	25.7	0.9
Deep Springs C	0.0	0.0	0.0	0.0	95.8
Dominican C					
of San Rafael	0.7	2.0	1.6	5.4	77.2
Dominican Sch of					
Philosophy & Theol	0.0	0.0	0.0	9.1	90.9
Don Bosco Tech Inst	0.0	0.3	7.6	42.9	49.2
El Camino C	1.4	18.1	8.6	8.5	62.9
Fash Inst of Design					
& Merchandising	0.2	8.18	6.3	10.2	69.0
Foothill-DeAnza CC					
De Anza C	1.8	3.0	9.5	5.8	79.6
Foothill C	1.2	4.6	10.0	5.1	77.6
Fresno Pacific C	0.9	3.1	1.3	8.3	83.9
Fullerton C	1.0	1.9	5.2	9.3	82.3
Gavilan C	1.5	1.6	2.7	27.9	59.6
Glendale CC	1.3	1.4	6.6	18.1	68.8
Golden Gate U	0.5	8.8	15.3	5.3	62.1
Grossmont C	1.9	2.8	3.1	5.9	85.8
Hartnell C	2.4	3.2	4.7	24.4	64.3
Heald Engineering C	0.0	8.6	1.4	2.8	72.3
Holy Family C	1.2	1.2	0.0	6.2	91.4
Holy Names C	1.2	8.6	2.8	4.7	37.6
Humphreys C	2.0	10.5	2.0	13.3	61.3
Imperial Valley C	1.1	3.5	1.3	54.1	37.1
Indian Valley C's	2.4	2.8	2.7	4.3	86.7
International C	0.0	1.3	1.3	5.0	90.0
J F Kennedy U	1.1	7.0	2.1	0.5	88.5
Lake Tahoe CC	1.2	0.4	1.2	3.9	92.8
Lassen C	5.8	4.4	1.4	3.1	82.7
Life Bible C	0.7	7.9	3.3	7.3	78.5
Lincoln U	0.0	4.9	33.3	1.7	11.1
Loma Linda U	0.3	8.6	8.5	7.4	55.3
Long Beach City C	1.1	11.9	6.1	7.2	71.8
Los Angeles Baptist C	0.0	2.0	2.0	2.0	93.4
Los Angeles CC					
East L A C	1.1	4.7	11.7	71.8	9.3
L A City C	1.4	38.2	18.6	21.2	18.1
L A Harbor C	2.2	17.8	16.2	20.6	42.8
L A Mission C	2.3	11.7	2.9	45.2	37.7
L A Pierce C	2.9	4.3	6.6	7.7	78.2
L A SW C	0.4	98.4	0.4	0.4	0.3
L A Trade & Tech C	1.9	52.2	7.2	26.2	12.2
L A Valley C	3.1	7.4	8.0	14.7	65.1
West L A C	1.5	56.9	7.5	6.7	27.4
Los Rios CC					
American River C	1.6	7.5	2.9	4.7	82.8
Cosumnes River C	1.7	14.3	7.5	7.8	68.3
Sacramento City C	1.3	17.0	11.5	11.7	54.5
Loyola Marymount U	0.2	8.0	4.2	16.2	66.5
Marymount Palos					
Verdes C	0.3	9.5	6.2	9.3	41.9
Melodyland Sch					
of Theology	1.0	1.0	0.0	6.1	84.7
Mendocino C	6.4	1.5	0.7	3.4	86.8
Menlo C	0.1	1.0	1.9	1.2	73.5
Merced C	1.2	10.7	2.8	14.7	66.8
Mills C	0.4	11.0	6.0	3.0	67.6
Mira Costa C	1.1	8.8	3.7	9.8	75.8
Modesto JC	1.3	1.3	1.9	5.8	84.6
Monterey Inst for					
Foreign Studies	0.0	1.3	2.6	11.5	76.9
Monterey Peninsula C	0.8	13.0	8.8	5.0	72.5
Mt St Mary's C	0.3	8.0	8.1	16.2	63.8
Mt San Antonio C	1.1	8.5	4.1	20.6	65.4
Mt San Jacinto C	2.3	3.2	1.1	8.1	84.5
Napa C	1.4	2.8	2.9	6.1	85.8
National U	0.5	12.9	5.9	5.1	69.9
New C of California	0.4	11.5	1.3	4.0	76.7
Northrop U	2.1	4.6	3.5	4.9	22.0
Occidental C	0.2	4.8	9.2	6.2	76.3
Ohlone C	0.8	4.4	8.8	7.5	77.7
Otis Art Inst	0.0	6.2	4.6	8.7	73.9
Pacific Christian C	1.5	10.9	2.8	4.8	78.5
Pacific Oaks C	0.0	7.8	0.0	5.9	84.3
Pacific Union C	0.8	3.7	7.1	4.1	75.0
Palomar C	1.9	2.4	3.5	7.7	83.7
Palo Verde C	0.8	5.2	0.0	28.5	64.7
Pasadena City C	0.5	12.6	6.7	12.1	64.6
Patten Bible C	0.0	34.5	10.7	9.5	38.1
Pepperdine U	1.0	8.5	2.5	4.1	88.5
Peralta CC's					
C of Alameda	1.4	41.3	10.4	6.3	40.1
Feather River C	3.2	2.3	0.3	1.8	92.4
Laney C	1.6	47.7	9.9	6.2	32.9
Merritt C	1.7	41.1	6.7	4.6	45.3
Vista C	0.6	14.0	2.5	4.7	74.6
Point Loma C	0.6	1.7	1.7	3.1	90.2
Porterville C	2.3	2.2	2.8	19.6	70.9
Rio Hondo C	2.0	1.7	1.2	35.1	50.5
Riverside City C	2.0	10.5	1.5	9.9	75.4
Saddleback CC	1.0	1.3	4.0	3.9	89.5
St John's C	0.0	2.7	2.7	9.5	85.1
St Mary's C of Cal	0.4	6.3	2.2	7.5	78.6
St Patrick's C	1.6	0.0	20.6	12.7	61.9
San Bernardino Valley C	1.5	13.3	1.9	17.4	65.2
San Diego CC					
City C	1.0	32.0	4.1	17.7	43.2
Mesa C	0.7	6.1	4.2	6.3	81.1
Miramar C	0.9	7.0	5.4	7.0	78.8
San Francisco Art Inst	1.8	3.5	3.5	3.5	69.6
San Francisco CC District	0.5	14.6	35.4	10.7	37.4
San Francisco C					
of Mortuary Science	1.3	28.0	1.3	4.0	65.3
San Francisco					
Conservatory Music	0.7	3.4	10.3	6.2	68.3
San Joaquin					
Delta C	2.0	6.3	6.3	15.2	69.0
San Jose Bible C	0.0	5.5	3.0	1.7	89.8
San Jose CC					
Evergreen Valley C	0.3	5.0	8.7	9.3	76.5
San Jose City C	0.4	2.1	6.7	5.6	85.2
San Mateo County CC					
Canada C	0.6	7.7	2.1	6.5	71.4
C of San Mateo	0.7	4.5	4.7	6.4	74.2
Skyline C	1.3	9.1	9.5	11.0	58.4
Santa Ana C	1.1	5.2	4.2	16.6	69.9
Santa Barbara					
City C	1.3	3.2	2.8	9.7	81.3
Santa Monica C	1.0	8.9	8.7	9.5	68.4
Santa Rosa JC	1.2	1.6	2.9	4.2	90.1
Shasta C	2.7	0.5	0.4	2.0	93.9
Sierra C	1.6	0.5	1.4	3.4	91.3
Simpson C	0.0	5.3	4.9	2.2	83.6
Solano CC	1.3	15.6	6.9	5.7	66.8
Southern California C	0.8	2.1	2.5	7.4	83.6
Southern California C					
of Optometry	0.0	0.0	6.9	6.9	86.2
Southern California					
Inst of Architecture	0.0	0.0	0.0	4.1	78.0
CALIFORNIA—Continued					
Southwestern C	0.7	4.7	10.4	24.3	55.6
Stanford U	0.6	6.1	6.3	6.5	78.3
State Center CC					
Fresno City C	1.3	7.8	3.2	22.6	63.9
Kings River CC	1.4	1.5	3.6	29.0	63.2
Taft C	1.9	4.5	0.3	2.5	88.3
U S International U	0.5	5.8	8.8	2.5	33.1
U of California					
Berkeley	0.4	3.6	21.6	4.0	68.1
Davis	0.5	2.8	11.9	4.1	80.2
Irvine	0.6	5.5	11.1	13.0	65.4
Los Angeles	0.3	6.2	17.3	6.3	66.5
Riverside	0.8	8.5	7.3	9.5	72.9
San Diego	0.4	4.4	10.1	5.6	76.8
San Francisco	1.2	3.2	17.9	4.4	72.5
Santa Barbara	0.8	2.3	5.3	5.9	84.1
Santa Cruz	0.5	1.9	3.6	5.7	86.9
U of Judaism	0.0	0.0	0.0	0.0	94.2
U of La Verne	0.4	8.8	3.9	9.6	65.2
U of the Pacific	0.3	2.9	9.3	5.9	75.5
U of Redlands	0.4	1.9	2.4	3.1	90.0
U of San Diego	0.5	2.8	3.2	8.0	80.8
U of San Francisco	0.4	5.7	12.3	6.8	55.0
U of Santa Clara	0.9	2.2	7.9	8.7	73.6
U of Southern California	0.4	7.1	11.8	6.9	60.1
U of West L A	.0	19.1	[illegible]	4.3	71.3
Ventura County CC					
Moorpark C	1.5	1.2	2.2	7.8	87.1
Oxnard C	1.3	7.7	8.0	27.9	54.9
Ventura C	1.8	2.8	3.3	17.3	74.7
Victor Valley C	1.4	9.6	1.2	6.3	75.7
West Coast Bible C	1.0	2.6	2.6	9.3	77.7
West Coast U					
Main Campus	1.2	5.2	6.4	3.5	42.2
Orange County Center	0.4	2.3	10.8	5.0	66.9
Western St U					
C of Law:					
Orange County	1.5	2.6	2.0	5.5	88.1
San Diego	2.3	3.5	3.5	4.7	86.0
West Hills C	2.3	6.6	4.1	16.0	69.3
Westmont C	0.1	0.6	1.5	1.6	94.4
West Valley Jount CC					
Mission C	1.8	4.3	13.1	11.3	67.9
West Valley C	1.8	1.5	5.7	6.0	83.6
Whittier C	0.9	7.3	8.6	19.9	55.0
Woodbury U	0.2	2.7	3.2	2.1	22.5
World C West	0.0	5.8	3.8	3.8	86.5
Yeshiva U of Los Angeles	0.0	0.0	0.0	0.0	100.0
Yuba C	2.5	5.1	2.3	10.7	79.2
COLORADO					
Adams St C	0.5	1.3	0.5	17.4	78.9
Aims CC	0.8	0.8	1.3	17.7	77.7
Arapahoe CC	0.6	1.1	0.5	1.9	91.6
Baptist Bible of Denver	3.3	1.3	1.3	1.3	92.8
Colorado C	0.5	2.9	1.6	3.7	90.1
Colorado Mountain C	0.8	0.1	0.8	3.6	94.7
Colorado NW CC	0.0	3.9	0.6	5.7	86.7
Colorado Sch of Mines	0.1	0.3	1.1	1.7	92.7
Colorado St U	0.3	1.0	1.2	2.5	94.5
Colorado Tech C	0.0	3.3	0.6	2.9	86.3
Colorado Women's C	0.3	5.5	0.1	5.2	88.3
CC of Denver					
Auraria	1.8	13.8	2.3	9.6	60.5
North Campus	1.6	2.3	2.1	9.6	81.0
Red Rocks	1.6	1.5	0.6	5.3	86.0
Fort Lewis C	5.3	0.3	0.3	3.4	89.4
Intermountain Bible C	1.2	0.0	0.0	1.2	96.3
Lamar CC	0.0	5.7	0.0	11.3	79.9
Loretto Heights C	0.0	4.4	2.2	7.3	83.0
Mesa C	0.0	0.4	0.3	2.6	96.8
Metropolitan St C	0.7	6.8	1.6	7.6	82.5
Morgan CC	1.6	0.5	1.6	10.6	69.7
Naropa Institute	0.0	4.8	0.0	2.4	86.3
Nazarene Bible C	0.6	3.9	0.6	0.9	92.8
Northeastern JC	0.4	3.0	0.5	2.8	92.8
Otero JC	1.1	1.6	0.8	19.6	77.1
Pikes Peak CC	1.3	9.0	1.3	7.2	79.9
Pueblo Vocational CC	0.8	1.7	0.3	34.7	62.5
Regis C	0.9	6.0	2.4	5.0	83.3
Rockmont C	0.7	3.0	0.7	1.5	90.8
St Thomas Seminary	0.0	0.0	0.0	7.1	92.9
Trinidad St JC	1.9	5.4	0.2	23.5	62.7
U of Colorado					
Boulder	0.6	2.1	2.3	3.5	90.3
Colorado Springs	0.2	3.7	2.1	3.7	86.7
Denver	0.6	4.3	4.6	5.1	81.2
Health Science Center	0.6	2.4	2.1	5.7	89.3
U of Denver	0.9	2.6	2.0	2.5	85.8
U of Northern Colorado	0.4	2.7	0.9	4.1	91.0
U of Southern Colorado	0.5	4.8	0.8	19.3	65.9
Western Bible C	0.0	1.0	0.0	2.0	95.5
Western St C	0.3	0.6	0.2	2.2	95.9
Yeshiva Toras Chaim					
Talmudical Seminary	0.0	0.0	0.0	0.0	81.8
CONNECTICUT					
Albertus Magnus C	0.2	9.3	0.9	3.0	84.2
Asnuntuck CC	0.1	0.8	0.8	0.2	98.3
Bais Binyomin Academy	0.0	0.0	0.0	0.0	100.0
Briarwood College	0.0	1.8	0.0	0.8	97.4
Bridgeport					
Engineering Inst	0.0	7.1	4.5	4.9	82.4
Central Conn St C	0.2	2.5	1.1	1.2	94.1
Connecticut C	0.1	2.1	0.4	0.3	94.9
E Conn St C	1.1	3.1	0.3	1.2	93.5
Fairfield U	0.0	1.8	0.3	1.7	95.9
Greater Hartford CC	0.5	30.4	1.2	6.6	60.2
Greater New Haven Tech	0.0	7.9	1.1	0.7	90.2
Hartford C for Women	0.0	8.5	0.0	1.0	85.4
Hartford St Tech C	0.1	4.8	2.0	2.0	91.1
Holy Apostles C	0.0	0.0	4.2	0.0	93.8
Housatonic Regional CC	0.0	17.0	2.1	5.0	74.7
Manchester CC	0.3	3.6	0.5	0.7	94.7
Mattatuck CC	0.4	7.4	0.3	2.8	89.2
Middlesex CC	0.4	3.7	0.1	1.4	94.4
Mitchell C	0.5	4.2	0.2	1.7	89.9
Mohegan CC	0.3	3.8	0.2	0.9	94.7
Mt Sacred Heart C	0.0	0.0	0.0	0.0	100.0
NW Conn CC	0.5	0.6	0.4	0.2	98.2
Norwalk CC	0.1	14.1	0.8	2.8	81.2
Norwalk St Tech C	0.8	8.7	1.9	2.6	86.1
Post College	0.1	6.0	0.1	1.4	92.3
Quinebaug Valley CC	0.9	0.5	0.5	1.3	96.5
Quinnipiac C	0.0	1.3	0.2	0.4	97.9
Sacred Heart U	0.0	2.8	0.2	2.6	93.1
St Alphonsus C	0.0	6.4	0.0	40.4	53.2
St Joseph C	0.6	1.5	0.4	1.3	95.5

2,900 U.S. Colleges and Universities

	American Indian	Black	Asian	Hispanic	White
CONNECTICUT—Continued					
South Central CC	0.4	28.3	0.8	4.8	65.6
Southern Conn St C	0.1	5.1	0.2	1.0	93.5
Thames Valley St Tech C	0.5	1.4	1.0	1.4	95.6
Trinity C	0.1	3.2	1.0	0.8	93.6
Tunxis CC	0.0	1.9	0.6	1.2	96.4
U of Bridgeport	0.1	2.3	0.3	0.8	90.2
U of Connecticut	0.2	3.6	1.0	1.4	93.7
U of Hartford	0.7	3.7	0.7	0.8	92.4
U of New Haven	0.0	12.1	1.1	2.1	81.7
Waterbury St Tech C	0.1	1.6	0.5	0.8	97.0
Wesleyan U	0.0	6.0	3.1	2.3	87.3
Western Conn St C	2.6	2.5	0.8	1.6	92.1
Yale U	0.2	6.0	5.5	3.7	80.2
DELAWARE					
Brandywine C of Widener U	0.0	8.1	0.7	0.5	90.5
Delaware St C	0.0	75.0	0.1	0.0	22.4
Delaware Tech & CC					
Southern Campus	0.4	17.6	0.0	0.4	81.1
Stanton Campus	0.2	8.4	0.5	0.6	90.1
Terry Campus	0.6	18.4	0.9	1.8	78.3
Wilmington	0.0	30.5	2.9	3.3	59.7
Goldey Beacom C	0.1	9.1	0.6	1.1	85.4
U of Delaware	0.1	2.9	0.5	0.5	94.2
Wesley C	0.0	8.0	0.1	0.8	90.7
Wilmington C	0.1	16.9	0.7	1.3	79.0
DISTRICT OF COLUMBIA					
American U	0.0	12.4	1.7	2.3	72.8
Beacon College	0.0	41.1	0.0	12.5	44.6
Benjamin Franklin U	0.0	33.9	0.3	0.0	56.0
Catholic U	0.1	5.7	2.9	2.4	82.8
Corcoran School of Art	0.0	17.1	4.2	3.9	69.8
Gallaudet C	0.9	5.9	0.8	2.5	78.2
Georgetown U	0.2	5.8	1.5	3.9	84.1
George Washington U	0.2	4.8	2.9	2.4	78.5
Howard U	0.1	84.7	0.4	0.4	0.9
Mt Vernon C	0.0	10.0	0.6	1.5	77.4
Southeastern U	0.6	48.6	4.4	1.8	9.0
Strayer C	0.3	75.8	2.2	1.8	9.2
Trinity C	0.0	6.1	0.0	5.2	83.3
U of the District of Columbia	1.4	86.5	2.4	1.0	2.0
Washington International C	0.0	89.0	0.0	2.5	4.2
FLORIDA					
Art Inst of Ft Lauderdale	0.3	3.7	1.2	7.4	79.6
Barry C	0.1	3.7	0.8	15.6	68.9
Bethune Cookman C	0.4	93.9	0.3	0.1	1.3
Biscayne C	0.0	4.7	0.0	71.0	21.5
Brevard CC	0.5	7.4	1.1	2.0	85.5
Broward CC	0.3	7.0	1.2	3.3	87.0
Central Florida CC	0.6	12.5	0.8	1.8	82.6
Chipola JC	0.4	17.5	0.1	0.7	81.1
Clearwater Christian C	0.0	1.0	0.0	0.0	96.6
C of Boca Raton	0.0	1.1	0.0	0.0	84.5
Daytona Beach CC	0.1	9.6	0.8	1.4	87.3
Eckerd C	0.0	6.8	0.2	3.3	79.1
Edison CC	0.1	4.0	0.4	2.5	92.4
Edward Waters C	0.0	97.2	0.0	0.0	0.4
Embry-Riddle Aeronautical U	0.4	3.5	0.5	2.5	87.3
Flagler C	0.1	2.4	0.1	1.4	95.3
Florida C	0.7	2.3	0.0	2.3	93.8
Florida Inst of Tech	0.1	2.7	0.8	3.0	81.1
Florida JC at Jacksonville	0.3	19.2	1.0	1.0	78.1
Florida Keys CC	0.6	4.7	1.5	8.3	84.4
Florida Memorial C	0.0	63.7	0.0	31.6	1.7
Florida Southern C	0.4	3.5	0.3	1.6	93.2
Ft Lauderdale C	0.4	32.4	0.8	6.8	46.8
Gulf Coast CC	0.3	9.4	1.2	1.8	86.8
Hillsborough CC	0.2	11.5	1.3	6.4	79.5
Horeb Seminary	0.0	0.0	0.0	0.0	100.0
Indian River CC	0.3	11.9	0.8	1.0	83.5
International Fine Arts C	0.0	21.0	0.0	9.0	70.0
Jacksonville U	0.4	5.9	1.0	4.1	85.5
Jones C					
Jacksonville	0.0	30.2	1.6	1.6	65.1
Orlando	0.1	31.5	0.4	1.6	63.7
Lake City CC	0.6	21.2	0.4	1.4	75.7
Lake-Sumter CC	0.1	12.1	0.5	0.9	86.4
Lakeland C of Business & Fashion	0.0	21.8	0.4	0.4	77.0
Manatee JC	0.3	5.4	0.4	1.2	91.2
Miami Christian C	0.0	9.0	0.0	7.6	78.6
Miami-Dade CC	0.2	13.3	1.1	43.8	34.1
Morris JC of Business	0.5	15.8	0.0	2.7	81.0
North Florida JC	0.4	25.8	0.4	0.4	72.5
Nova U	0.3	14.3	1.0	3.4	68.7
Okaloosa-Walton JC	0.3	6.5	1.2	1.3	90.6
Palm Beach Atlantic C	0.0	10.3	0.2	1.7	83.2
Palm Beach JC	0.2	7.5	0.5	3.7	86.5
Pasco-Hernando CC	0.7	4.6	0.3	1.6	92.8
Pensacola JC	0.7	10.8	1.7	0.8	86.0
Polk CC	0.2	13.2	0.5	1.1	84.6
Ringling Sch of Art	0.4	0.8	0.4	1.6	95.4
Rollins C	0.4	5.0	0.3	2.1	90.5
St Johns River C	0.2	6.7	0.4	0.3	91.7
St John Vianney C Seminary	0.0	2.2	0.0	50.0	47.8
St Leo C	0.2	18.3	0.8	2.9	74.5
St Petersburg JC	0.4	5.0	0.7	1.6	90.7
Santa Fe CC	0.2	12.4	0.8	3.1	78.7
Seminole CC	0.6	7.9	1.1	2.7	46.6
SE C of the Assemblies of God	0.7	2.5	0.2	2.8	92.0
South Florida JC	0.4	6.3	0.6	2.1	90.6
Florida A&M U	0.0	89.8	1.9	0.2	7.0
Florida Atlantic U	0.0	4.8	0.6	3.9	85.9
Florida International U	0.1	8.3	3.2	33.6	53.5
Florida St U	0.1	9.1	0.3	1.9	88.0
U of Central Florida	0.1	3.9	0.9	3.2	89.8
U of Florida	0.1	5.1	1.3	4.5	87.2
U of North Florida	0.2	8.4	0.8	0.7	89.6
U of South Florida	0.2	4.3	0.6	4.7	88.0
U of West Florida	0.4	6.8	1.5	1.2	89.1
Stetson U	0.1	2.0	0.2	0.8	95.8
Tallahassee CC	0.3	16.7	0.6	1.8	80.6
Talmudic C of Fla	0.0	0.0	0.0	0.0	100.0
Tampa C	0.0	14.9	0.3	3.2	80.8
Tampa Tech Inst	0.0	20.1	0.6	2.1	75.7
United Electronics Inst of Florida	0.0	45.1	0.0	0.0	53.9
U of Miami	0.2	6.3	1.3	19.3	62.1
U of Sarasota	0.0	8.3	0.0	0.0	91.7
FLORIDA—Continued					
U of Tampa	0.1	3.6	0.1	2.1	84.9
Valencia CC	0.4	8.9	1.4	3.3	83.4
Warner So C	0.0	2.3	0.0	0.0	94.4
Webber C	0.0	4.4	0.0	0.0	86.8
GEORGIA					
Abraham Baldwin Agricultural C	0.1	4.7	0.2	0.2	92.1
Agnes Scott C	0.4	2.7	1.2	1.8	92.4
Albany JC	0.6	24.1	0.4	0.6	74.2
Albany St C	0.0	94.3	0.1	0.0	5.6
Andrew C	0.0	20.2	0.0	2.8	77.0
Armstrong St C	0.1	13.3	1.1	0.4	84.7
Art Inst of Atlanta	0.0	20.2	0.0	0.0	77.2
Atlanta Christian C	0.0	4.8	0.0	0.0	92.6
Atlanta C of Art	0.4	15.8	1.9	0.8	77.7
Atlanta JC	0.0	78.4	3.4	0.1	7.3
Augusta C	0.3	13.7	1.6	1.2	83.0
Bainbridge JC	0.0	21.2	0.0	0.0	78.8
Berry C	0.0	3.4	0.2	0.8	93.5
Brenau C	0.2	3.3	0.1	0.0	94.4
Brewton-Parker C	0.1	25.4	2.8	0.1	71.5
Brunswick JC	0.0	16.6	1.2	0.3	81.8
Clark C	0.0	100.0	0.0	0.0	0.0
Clayton JC	0.3	5.4	0.4	0.7	92.8
Columbus C	0.3	18.3	0.9	1.1	78.4
Covenant C	0.0	2.6	0.6	1.2	92.6
Crandall College	0.0	56.5	0.0	0.5	42.9
Dalton JC	0.0	3.5	0.1	0.0	96.4
Dekalb CC	0.5	19.6	1.0	1.1	78.3
Devry Inst of Tech	0.3	27.1	0.8	0.9	70.0
Draughon's JC of Business	0.0	48.6	0.3	0.1	51.0
Emanuel County JC	0.0	18.0	0.0	0.0	82.0
Emmanuel C	0.0	6.6	0.0	0.0	93.4
Emmanuel Sch of Ministries	0.0	0.0	0.0	0.0	100.0
Emory U	0.0	3.0	0.8	1.2	92.9
Floyd JC	0.2	8.8	0.4	0.3	90.2
Fort Valley St C	0.1	89.9	0.1	0.1	7.2
Gainesville JC	0.3	4.5	0.3	0.1	93.6
Georgia C	0.0	19.8	0.1	0.3	79.1
Georgia Inst of Tech					
Main Campus	0.1	6.5	1.6	1.1	86.7
Southern Tech	0.0	9.2	0.6	1.0	88.2
Georgia Military C	0.1	33.0	0.6	5.0	60.9
Georgia Southern C	0.1	8.8	0.0	0.3	90.2
Georgia SW C	0.0	19.7	0.4	0.3	79.0
Georgia St U	0.2	18.8	0.7	0.9	78.9
Gordon JC	0.0	14.8	0.7	0.3	84.2
Kennesaw C	0.1	1.7	0.3	0.4	96.3
La Grange C	0.1	10.1	0.0	0.1	86.1
Macon JC	0.2	18.5	0.3	0.5	80.4
Medical C of Georgia	0.0	8.5	0.1	1.1	90.0
Mercer U					
Main Campus	0.1	16.2	0.2	1.2	81.8
Atlanta	0.7	13.1	0.6	1.2	80.2
Southern Sch of Pharmacy	0.0	7.6	0.3	0.9	81.7
Middle Georgia C	0.1	12.0	0.3	0.1	83.3
Morehouse C	0.0	97.7	0.0	0.0	0.0
Morris Brown C	0.0	96.8	0.2	0.0	0.1
North Georgia C	0.1	4.6	0.0	0.4	94.8
Oglethorpe U	0.1	1.9	0.9	2.9	94.2
Paine C	0.1	97.1	0.0	0.0	2.8
Phillips C	0.0	30.1	1.8	0.6	67.3
Piedmont C	0.0	13.3	3.3	0.8	77.9
Reinhardt C	0.0	3.9	0.0	0.0	93.9
Savannah St C	0.6	75.2	0.0	0.2	17.4
Shorter C	0.0	5.3	0.0	0.1	93.1
South Georgia C	0.0	22.7	0.9	0.5	70.7
Spelman C	0.0	93.2	0.0	0.0	0.0
Thomas County CC	0.0	28.0	0.0	0.0	70.7
Tift C	0.1	14.4	0.0	0.0	85.5
Toccoa Falls C	0.0	0.0	0.2	0.5	97.7
Truett McConnell C	0.0	15.0	0.0	0.0	85.0
U of Georgia	0.2	4.5	0.3	0.5	93.6
Valdosta St C	0.0	11.9	0.3	0.3	87.0
Waycross JC	0.0	12.4	0.0	0.5	87.1
Wesleyan C	0.3	9.1	0.3	0.8	83.3
West Georgia C	0.2	16.6	0.1	0.2	82.6
Young Harris C	0.0	0.4	0.0	0.2	99.4
HAWAII					
Chaminade U of Honolulu	0.3	6.2	30.4	1.7	61.1
Hawaii Loa C	2.5	1.5	16.9	1.5	30.9
Hawaii Pacific C	0.2	10.1	27.8	1.7	42.6
U of Hawaii					
Hilo	0.7	0.4	64.5	6.5	22.5
Honolulu CC	0.2	1.3	78.1	3.7	13.7
Kapiolani CC	0.1	0.8	81.3	2.3	12.8
Kauai CC	0.1	0.4	72.8	7.5	16.9
Leeward CC	0.2	2.3	72.7	2.9	20.1
Manoa	0.1	0.4	68.6	1.3	25.4
Maui CC	0.2	0.1	61.7	8.0	28.0
Windward CC	0.8	0.4	53.6	6.9	38.0
West Oahu C	0.5	1.4	62.4	4.6	30.3
IDAHO					
Boise St U	0.9	0.9	1.5	3.4	92.8
C of Idaho	0.0	1.3	4.2	1.3	92.8
C of Southern Idaho	0.5	0.6	0.6	1.7	95.3
Idaho St U	1.2	1.1	3.8	1.9	91.7
Lewis-Clark St C	4.1	0.6	0.1	0.4	94.0
North Idaho C	1.0	0.8	0.1	0.8	96.4
NW Nazarene C	0.9	1.2	0.5	1.1	94.9
Ricks C	0.6	0.0	0.1	0.5	94.8
U of Idaho	0.6	0.4	0.6	0.6	95.8
ILLINOIS					
American Academy of Art	0.2	7.0	0.0	7.0	85.2
American Conservatory of Music	0.0	17.3	2.2	3.5	75.6
Augustana C	0.0	5.3	0.4	0.5	93.3
Aurora C	0.3	9.4	0.8	4.0	84.8
Barat C	0.2	5.5	0.3	0.8	89.7
Belleville Area C	0.0	3.0	1.0	0.0	96.0
Blackburn C	0.0	12.6	0.4	1.1	82.4
Black Hawk C					
East Campus	0.6	2.4	0.6	0.7	95.7
Quad Cities	0.4	5.4	3.0	3.7	87.6
Bradley U	0.0	8.0	0.4	0.7	87.9
Carl Sandburg C	0.8	3.3	0.5	1.7	93.3
Central YMCA CC	0.4	78.0	0.2	9.8	6.9
Chicago Conservatory C	0.0	57.7	3.8	7.7	25.0
Chicago St U	0.2	87.5	0.2	2.3	9.0
ILLINOIS—Continued					
City C of Chicago					
City-Wide C	1.7	41.6	2.8	11.7	42.2
Kennedy-King C	0.0	98.9	0.6	1.4	0.6
Loop C	2.4	62.5	7.5	8.4	15.9
Malcolm X C	7.0	84.5	2.9	5.0	0.5
Olive-Harvey C	0.6	93.4	0.1	2.7	2.9
Richard J Daley C	1.5	9.7	1.4	7.5	79.4
Truman C	3.8	21.3	20.6	16.3	38.2
Wright C	2.0	9.8	6.9	7.9	65.6
C of Dupage	0.2	1.1	2.0	1.0	95.6
C of Lake County	0.3	7.7	1.1	4.4	86.6
C of St Francis	0.0	6.0	0.8	1.4	91.8
Columbia C	0.7	40.3	1.1	4.9	51.5
Concordia C	0.1	2.9	0.8	0.7	94.9
Danville Area CC	0.5	7.5	2.2	1.0	87.8
DeLourdes C	0.0	0.0	1.9	0.0	98.1
DePaul U	0.2	11.0	2.5	4.8	80.6
DeVry Inst of Tech	0.2	27.0	7.2	7.8	56.5
Eastern Illinois U	0.1	6.2	0.5	0.5	92.0
Elgin CC	0.3	2.5	2.4	2.9	91.7
Elmhurst C	0.2	4.3	1.0	7.9	86.0
Eureka C	0.0	15.8	0.0	0.9	82.0
Felician C	0.0	3.6	5.5	8.7	70.3
Gem City College	0.0	0.0	0.0	0.0	100.0
George Williams C	0.4	16.8	0.7	4.4	78.7
Governors St U	0.2	24.8	2.1	4.8	67.2
Greenville C	0.0	5.7	1.0	0.4	91.9
Harrington Inst	0.5	1.2	0.7	1.2	96.6
Hebrew Theol C	0.0	0.0	0.0	0.0	78.8
Highland CC	0.2	3.5	0.3	0.5	95.5
Illinois Benedictine C	0.0	1.6	0.0	0.6	97.8
Illinois Central C	0.5	1.8	0.6	0.5	96.5
Illinois C	0.0	1.6	0.1	0.8	97.0
Illinois Eastern CC					
Frontier CC	0.0	0.0	0.0	0.0	100.0
Lincoln Trail C	0.0	0.3	0.1	0.0	99.6
Olney Central C	0.0	0.4	1.5	0.0	98.1
Wabash Valley C	0.0	1.0	0.0	0.0	98.9
Illinois Tech C	0.0	68.6	2.9	8.6	20.0
Illinois Inst of Tech	0.1	16.9	8.3	5.2	62.8
Illinois St U	0.2	8.6	0.8	0.6	89.0
Illinois Valley CC	0.0	0.9	0.0	0.0	99.1
Illinois Wesleyan U	0.1	5.1	0.9	0.6	92.6
John A Logan C	0.5	7.4	0.7	0.4	90.1
John Wood CC	0.2	1.7	0.4	0.3	96.6
Joliet JC	0.2	9.8	1.0	3.0	85.8
Judson C	0.4	4.7	0.4	1.1	92.6
Kankakee CC	0.1	11.7	5.1	0.8	81.9
Kaskaskia C	0.8	1.8	0.7	1.5	95.2
Kendall C	0.0	23.9	0.3	0.3	68.8
Kishwaukee C	0.5	4.6	0.8	0.9	90.3
Knox C	0.1	2.9	1.5	1.0	88.6
Lake Forest C	0.1	7.2	1.1	0.9	88.0
Lake Land C	0.5	2.3	0.6	0.1	96.0
Lewis & Clark CC	0.3	4.0	0.2	0.3	94.4
Lewis U	0.1	13.1	1.2	2.0	82.9
Lincoln Christian C	0.5	1.0	0.2	0.0	97.5
Lincoln C	0.2	25.7	0.5	2.1	70.9
Lincoln Land CC	0.4	3.9	0.7	0.2	94.8
Loyola U of Chicago	0.1	11.3	3.2	5.8	79.2
Maccormac C	0.0	6.0	1.0	8.6	83.8
Macmurray C	0.0	8.4	1.6	1.9	88.0
Mallinckrodt C	0.4	1.6	7.1	6.7	77.9
McCormick Theol Seminary	0.0	17.6	5.9	28.4	47.1
McHenry County C	0.0	0.1	0.1	0.4	98.8
McKendree C	0.0	9.0	0.2	0.3	88.8
Midstate C	0.0	12.9	0.3	0.3	86.4
Midwest C of Engineering	0.6	2.8	6.1	2.8	86.7
Millikin U	0.0	6.6	0.2	1.3	91.2
Monmouth C	0.0	4.0	0.3	0.2	90.2
Moody Bible Inst	0.0	0.6	1.3	0.6	88.4
Moraine Valley CC	0.1	2.9	0.8	1.5	94.1
Morrison Inst of Tech	1.7	10.0	0.9	1.7	85.7
Morton C	0.1	0.1	0.8	2.4	96.5
Mundelein C	0.2	17.7	2.6	8.6	68.9
National C of Chiropractic	0.0	0.0	0.0	0.0	100.0
National C of Education					
Main Campus	0.0	10.1	3.6	2.9	81.9
Urban Campus	0.9	22.4	8.7	31.2	36.5
Native American Educational Services	98.1	0.0	0.0	0.0	0.9
North Central C	0.4	3.5	0.6	1.9	93.0
Northeastern Illinois U	0.3	11.0	5.8	10.8	70.7
Northern Illinois U	0.2	6.1	1.0	1.6	89.8
North Park C & Theol Seminary	0.3	5.3	1.8	2.3	89.4
Northwestern U	0.3	8.2	2.4	1.3	85.4
Oakton CC	0.1	2.5	3.4	1.2	92.7
Olivet Nazarene C	0.1	3.1	0.4	0.5	95.2
Parkland C	0.3	8.3	0.8	0.5	87.5
Prairie St C	0.2	15.0	1.2	2.1	80.6
Principia C	0.1	1.0	0.1	0.1	96.4
Quincy C	0.1	3.9	0.2	0.8	92.2
Rend Lake C	0.3	0.7	0.8	0.2	97.3
Richland CC	0.0	12.1	0.6	0.0	87.2
Rockford C	0.0	5.5	1.0	3.8	89.6
Rock Valley C	0.2	4.3	0.4	1.3	91.1
Roosevelt U	0.2	38.7	5.7	4.0	43.7
Rosary C	0.0	6.5	1.8	3.0	88.3
Rush U	0.0	14.3	5.0	2.5	77.8
St Xavier C	0.1	6.5	0.4	0.5	92.4
Sangamon St U	0.1	5.2	0.2	0.3	92.7
Sauk Valley C	0.2	1.0	3.1	4.0	91.7
Sch of Art Inst of Chicago	0.0	8.2	2.2	3.1	85.3
Shawnee C	0.1	14.0	0.5	0.1	85.3
Sherwood Music Sch	0.0	19.4	6.5	6.5	61.3
Shimer C	2.4	28.8	0.0	0.0	68.3
Southeastern Illinois C	0.4	11.7	0.8	1.3	84.9
Southern Illinois U					
Carbondale	0.5	9.1	1.0	1.0	84.3
Edwardsville	0.2	16.0	0.7	0.5	80.3
Spertus C of Judaica	0.0	1.6	0.0	0.0	83.7
Spoon River C	0.5	1.4	0.3	0.1	97.5
Springfield C in Ill	0.5	3.7	1.0	0.5	93.6
State CC	0.0	97.6	0.0	0.0	2.4
Telshe Yeshiva-Chicago	0.0	0.0	0.0	0.0	100.0
Thornton CC	0.2	14.8	1.9	2.2	80.9
Trinity Christian C	0.0	0.9	0.8	0.3	98.3
Trinity C	0.2	3.4	1.2	1.2	91.2
Triton C	0.1	8.3	1.6	2.7	86.2
U of Chicago	0.1	4.1	7.3	2.1	85.3
U of Health Sciences-Chicago Medical Sch	0.0	3.4	2.3	2.3	92.0
U of Illinois					
Chicago Circle	0.5	17.9	8.9	9.1	61.4
Medical Center Chicago	0.2	8.9	7.5	2.5	81.9
Urbana	0.3	3.9	3.2	1.4	90.5
Vandercook C Music	0.0	48.5	0.0	3.0	48.5
ILLINOIS—Continued					
Waubonsee CC	0.3	5.2	0.4	4.4	87.9
Western Illinois U	0.1	9.2	0.4	0.8	87.0
Wheaton C	0.2	0.8	1.7	0.8	95.4
William R Harper C	0.2	0.7	0.8	1.7	94.3
INDIANA					
Ancilla Domini C	0.0	1.9	0.3	0.8	96.5
Anderson C	0.3	6.1	0.1	0.5	91.9
Ball St U	0.2	4.1	0.2	0.5	94.5
Bethel C	0.0	1.9	0.9	0.2	92.3
Butler U	0.2	3.3	0.7	0.5	94.5
Calumet C	0.2	12.2	0.8	11.9	74.5
Clark C	0.5	41.5	0.5	0.9	56.5
Depauw U	0.1	1.9	0.3	1.1	95.7
Earlham C	0.0	5.5	0.0	0.3	92.8
Ft Wayne Bible C	0.2	3.1	2.2	1.1	91.2
Franklin C of Ind	0.0	1.0	0.3	0.2	96.9
Goshen C	0.0	2.2	0.5	3.7	89.2
Grace C	0.2	0.6	0.2	0.6	98.1
Hanover C	0.0	0.9	0.5	0.2	94.3
Holy Cross JC	0.0	3.4	0.0	0.0	91.7
Huntington C	0.0	0.0	0.2	0.4	96.8
Indiana Central U	0.4	3.4	0.4	0.2	95.3
Indiana Inst of Tech	0.0	6.0	0.2	1.2	39.1
Indiana St U					
Main Campus	0.2	10.2	0.5	0.6	83.9
Evansville	0.1	3.2	0.3	0.4	94.9
Indiana U					
Bloomington	0.1	5.6	0.8	0.9	90.4
East	0.3	3.8	0.0	0.2	95.4
Kokomo	0.2	2.3	0.4	0.5	96.5
Northwest	0.0	28.6	0.4	7.1	63.1
Indiana U-Purdue U					
at Indianapolis	0.2	10.6	1.3	0.6	85.7
Ft Wayne	0.1	3.3	0.8	0.7	94.8
South Bend	0.1	5.8	0.4	0.8	92.5
Southeast	0.5	2.0	0.3	0.1	96.8
Ind Voc-Tech C					
Central Indiana	0.7	29.6	0.6	0.6	68.4
Columbus	1.7	1.7	0.6	0.6	95.4
Eastcentral	1.2	7.2	0.3	0.3	90.9
Kokomo	2.1	4.1	0.1	0.7	93.1
Lafayette	1.4	1.1	0.7	0.5	96.4
Northcentral	0.6	9.8	0.7	1.4	87.4
Northeast	0.9	8.4	0.5	1.1	89.0
Northwest	0.7	40.6	0.4	7.6	50.7
Southcentral	1.1	4.1	0.4	0.3	94.0
Southeast	1.4	1.4	0.6	0.4	96.3
Southwest	1.6	2.9	1.1	0.7	93.7
Wabash Valley	1.5	5.4	0.5	0.6	92.0
Whitewater	0.8	3.7	0.6	0.3	94.6
International Business C	0.0	2.2	0.0	0.0	97.8
ITT Educational Services	0.0	5.2	0.4	0.0	94.4
ITT Tech Inst	0.0	3.8	0.0	0.0	95.6
Lockyear C	0.0	22.7	0.0	0.0	76.4
Manchester C	0.1	3.3	0.1	0.6	94.8
Marian C	0.0	9.5	0.8	1.7	85.5
Marion C	0.3	4.0	0.8	0.2	92.0
Martin Center C	0.0	61.5	0.0	0.0	38.5
Mid-America C of Funeral Services	0.0	17.0	0.0	1.9	81.1
Oakland City C	0.0	4.8	0.3	0.0	94.7
Purdue U					
Main Campus	0.1	3.6	0.8	0.8	93.4
Calumet	0.2	9.9	1.0	6.1	82.8
North Central	0.4	3.9	0.6	0.5	94.6
Rose-Hulman Inst of Tech	0.0	0.7	0.3	0.2	98.2
St Francis C	0.0	3.0	0.5	1.0	93.6
St Joseph's C	0.0	3.9	0.3	2.4	93.1
St Mary's C	0.0	0.3	0.1	0.8	97.5
St Mary of the Woods C	0.6	2.8	0.6	2.3	85.9
St Meinrad C	0.0	2.7	0.5	0.0	96.8
Taylor U	0.7	0.8	0.0	0.1	97.8
Tri-State U	0.0	1.9	0.1	0.2	85.2
U of Evansville	0.1	4.3	0.1	0.2	91.5
U Notre Dame	0.1	2.7	1.2	2.7	92.1
Valparaiso U	0.1	2.1	0.4	0.8	95.4
Vincennes U	0.1	6.1	0.3	0.1	85.5
Wabash C	0.0	2.3	1.2	1.2	94.6
IOWA					
American Inst of Business	0.2	2.4	1.5	0.0	95.9
Briar Cliff C	0.2	2.0	0.4	0.2	96.0
Buena Vista C	0.0	0.3	0.0	0.0	99.7
Central U of Iowa	0.1	2.2	0.9	0.8	94.0
Clarke C	0.0	0.6	0.0	1.3	98.0
Coe C	0.1	2.8	1.9	0.5	94.7
Cornell C	0.3	3.8	0.9	0.7	90.3
Des Moines Area CC	0.2	2.2	0.9	1.0	94.3
Divine Word C	0.0	18.4	13.4	0.0	66.7
Dordt C	0.2	0.3	0.3	0.0	80.6
Drake U	0.2	7.2	1.3	0.6	88.8
E Iowa Dist CC					
Clinton	0.0	1.7	0.3	0.1	97.1
Muscatine	0.0	13.7	2.5	8.2	71.6
Scott	1.1	2.9	0.6	1.8	93.4
Ellsworth CC	0.0	6.2	0.1	0.1	92.3
Faith Baptist Bible C	0.0	0.5	0.2	0.2	98.1
Graceland C	0.5	1.2	1.5	0.8	92.4
Grand View C	0.3	6.1	2.0	0.3	87.8
Grinnell C	0.2	2.8	2.0	0.0	91.4
Hawkeye Inst of Tech	0.2	2.5	0.4	0.2	96.7
Indian Hills CC Centerville	0.4	1.0	1.1	0.3	97.2
Iowa Central CC	0.0	1.4	0.2	0.0	97.9
Iowa Lakes CC	0.0	0.6	0.2	0.2	98.6
Iowa St U of Science & Tech	0.1	1.4	0.6	0.4	94.4
Iowa Wesleyan C	0.0	4.9	0.4	0.1	93.6
Iowa Western CC	0.3	1.1	0.2	0.4	97.2
Kirkwood CC	2.2	1.3	1.1	0.7	94.2
Loras C	0.0	0.7	0.0	0.0	98.7
Luther C	0.0	3.6	0.0	0.1	94.1
Maharishi Intl U	0.6	2.3	0.6	1.9	88.4
Marshalltown CC	0.2	0.8	4.9	0.2	93.8
Marycrest C	0.2	3.6	0.3	1.3	94.3
Morningside C	1.8	2.9	0.4	0.4	93.7
Mt Mercy C	0.1	1.8	0.7	0.4	97.0
Mt St Clare C	0.0	0.0	0.9	0.6	96.8
Northeast Iowa Tech Inst	1.8	0.0	0.5	0.6	96.8
North Iowa Area CC	0.1	1.7	0.0	1.1	97.1
Northwest Iowa Tech C	0.0	0.0	0.0	0.0	100.0

Continued on Following Page

FACT-FILE—Continued

	American Indian	Black	Asian	Hispanic	White
IOWA—Continued					
Northwestern C	0.0	2.0	0.0	0.1	96.8
Open Bible C	0.0	1.1	0.0	0.0	98.9
St Ambrose C	0.1	2.4	0.2	1.1	95.5
Simpson C	0.0	5.3	0.5	0.4	92.9
Sioux Empire C	13.8	4.6	0.0	0.0	81.5
Southeastern CC	0.1	3.5	0.9	1.0	94.2
Southwestern CC	0.0	2.3	0.4	0.0	97.3
United Electronics Inst	0.3	7.9	2.6	0.0	89.1
U of Dubuque	0.2	2.9	0.0	0.7	92.6
U of Iowa	0.4	2.3	0.8	0.7	93.6
U of Northern Iowa	0.2	1.8	0.3	0.3	97.1
Upper Iowa U	0.1	3.7	0.1	0.4	94.8
Vennard C	0.6	0.0	0.6	1.2	94.2
Waldorf C	0.0	3.2	0.2	0.0	96.5
Wartburg C	0.0	1.7	1.6	0.2	92.1
Western Iowa Tech	1.8	1.1	0.8	0.6	95.5
Westmar C	0.3	7.7	0.3	0.7	89.3
William Penn C	0.2	15.4	1.2	1.2	80.9
KANSAS					
Allen County Community JC	0.0	2.2	0.0	0.7	93.4
Baker U	0.6	9.8	0.3	0.9	87.6
Barton County CC	0.5	2.2	0.2	0.3	96.7
Benedictine C	0.3	5.5	0.4	1.7	89.2
Bethany C	0.0	3.2	0.1	1.0	94.9
Bethel C	0.9	4.1	0.2	0.8	88.8
Butler County CC	1.2	7.7	0.8	1.9	87.2
Central C	0.3	3.5	0.7	0.3	95.1
Cloud County CC	0.2	2.6	0.2	0.2	96.7
Coffeyville CC	1.1	6.2	0.0	0.5	90.2
Colby CC	0.0	0.8	0.1	0.5	98.5
Cowley County CC	0.7	3.6	2.1	1.3	92.3
Dodge City CC	0.1	1.7	0.2	4.7	93.4
Donnelly C	0.7	47.9	2.0	5.6	20.6
Emporia St U	0.3	4.4	0.3	1.2	92.9
Ft Hays St U	0.6	1.2	0.2	0.8	94.7
Ft Scott CC	0.0	3.3	0.1	0.1	91.3
Friends Bible C	0.8	0.0	0.8	0.0	95.8
Friends U	0.2	4.1	0.1	0.2	92.3
Garden City CC	0.5	4.5	0.3	6.5	87.7
Haskell Indian JC	100.0	0.0	0.0	0.0	0.0
Hesston C	0.5	1.2	0.3	1.5	92.1
Highland CC	5.9	17.4	1.5	4.4	70.8
Hutchinson CC	0.7	7.3	0.3	2.4	88.6
Independence CC	0.3	5.8	0.2	1.2	90.9
Johnson County CC	0.1	1.0	0.7	0.6	97.4
KC Kansas CC	0.6	15.2	0.8	2.2	79.6
Kansas Newman C	0.1	7.0	0.0	6.3	85.7
Kansas St U of Ag & Applied Science	0.3	2.7	0.5	1.5	92.0
Kansas Tech Inst	0.2	4.4	0.5	2.2	91.7
Kansas Wesleyan	0.0	11.5	0.6	2.7	80.1
Labette CC	1.2	5.2	0.3	1.5	91.1
Manhattan Christian C	0.0	1.5	0.4	0.7	95.2
Marymount C	0.6	4.4	0.5	2.1	92.4
McPherson C	0.2	6.3	1.1	0.7	87.6
Mid-America Nazarene C	0.0	1.0	0.0	0.7	96.6
Neosho County CC	0.0	1.0	0.1	1.3	95.5
Ottawa U	1.1	18.5	0.0	2.4	74.8
Pittsburg St U	1.2	3.1	0.5	0.9	91.7
Pratt CC	0.0	7.1	0.0	2.4	82.0
St John's C	0.0	0.9	0.4	1.3	94.7
St Mary C	0.5	12.6	0.5	4.6	73.4
St Mary of the Plains C	0.2	2.6	0.0	5.9	90.7
Seward County JC	0.4	1.4	0.4	1.5	95.8
Southwestern C	1.7	5.5	0.2	1.7	88.0
Sterling C	0.2	4.9	0.4	0.9	89.0
Tabor C	0.0	3.8	0.0	0.8	90.9
U of Kansas	0.4	4.2	0.6	1.1	89.7
Medical Center	0.4	1.1	0.9	1.1	96.0
Washburn U	0.6	7.1	0.6	3.2	88.4
Wichita St U	0.9	6.8	1.2	2.0	85.5
KENTUCKY					
Alice Lloyd C	0.0	2.0	0.0	0.0	97.7
Asbury C	0.0	0.5	1.0	1.1	96.7
Bellarmine C	0.0	4.3	1.4	0.5	92.0
Berea C	0.1	6.9	0.5	0.2	85.7
Bowling Green Business C	0.3	25.6	0.3	0.0	73.4
Brescia C	0.0	1.5	0.0	0.0	96.3
Campbellsville C	0.0	3.0	0.3	0.0	95.8
Centre C of Ky	0.0	1.6	0.4	0.3	97.3
Cumberland C	0.0	4.7	0.0	0.2	94.0
Draughon's C	0.0	40.1	0.0	0.0	59.9
Eastern Kentucky U	0.1	6.9	0.3	0.2	91.1
Georgetown C	0.5	3.8	0.0	0.6	93.1
Inst of Electronic Tech	0.0	6.1	0.6	0.0	93.3
Kentucky Christian C	0.0	0.0	0.0	0.0	100.0
Kentucky C Tech	0.9	20.3	0.4	0.0	78.4
Kentucky JC of Business	0.6	14.9	0.4	0.0	83.8
Kentucky St U	0.1	66.1	0.1	0.0	32.2
Kentucky Wesleyan C	0.0	3.8	0.1	0.1	90.8
Lees JC	0.0	4.6	0.0	0.0	90.5
Lindsey Wilson C	0.0	10.1	0.0	0.0	89.0
Louisville Sch of Art	0.0	11.7	1.1	1.1	86.2
Louisville Tech Inst	0.0	17.6	6.7	0.0	74.2
Midway C	0.0	3.5	0.0	0.0	94.6
Morehead St U	0.3	3.7	0.2	0.2	94.7
Murray St U	0.2	5.6	0.4	0.3	92.4
Northern Kentucky U	0.2	0.7	0.2	0.0	98.1
Owensboro Business C	0.0	7.3	0.0	0.0	92.7
Pikeville C	0.2	2.6	0.3	0.3	96.2
St Catharine C	0.0	9.9	0.0	0.0	87.3
Seminary of St Pius X	0.0	1.0	1.0	2.9	95.2
Spalding C	0.3	14.8	0.4	0.9	82.1
Sue Bennett C	0.0	2.5	0.0	0.0	94.2
Thomas More C	0.1	1.7	0.7	0.3	95.8
Transylvania U	0.0	3.4	0.0	0.0	94.3
Union C	0.0	3.5	0.4	0.2	91.7
U of Kentucky	0.3	3.5	1.2	0.5	93.2
U of Kentucky CC System					
Ashland CC	0.2	1.3	0.1	0.1	98.2
Elizabethtown CC	0.4	5.1	1.0	0.8	92.0
Hazard CC	1.1	1.9	1.5	0.0	95.1
Henderson CC	0.5	8.3	0.5	0.3	90.0
Hopkinsville CC	0.2	14.5	0.4	0.1	84.5
Jefferson CC	0.7	27.9	0.3	0.5	68.7
Lexington Tech Inst	0.5	8.8	0.4	0.3	88.8
Madisonville CC	0.1	4.0	0.4	0.0	95.4
Maysville CC	0.2	3.7	0.5	0.0	95.6
Paducah CC	0.2	6.3	0.2	0.1	92.7
Prestonburg CC	0.3	0.3	0.3	0.0	97.2
Somerset CC	0.0	0.9	0.1	0.0	97.7
Southeast CC	0.0	5.7	0.0	0.7	93.6
U of Louisville	0.2	10.1	0.7	0.9	86.9
Watterson C	0.0	24.4	0.3	0.3	75.0
Western Kentucky U	0.2	7.6	0.1	0.3	89.3
LOUISIANA					
Bossier Parish CC	0.7	10.4	0.7	1.0	87.2
Centenary C of Louisiana	0.0	4.5	0.0	0.0	90.8
Delgado CC	0.4	38.7	0.8	3.3	51.9
Dillard U	0.1	97.8	0.0	0.1	0.1

	American Indian	Black	Asian	Hispanic	White
LOUISIANA—Continued					
Grambling St U	0.0	97.3	0.2	0.1	0.4
Louisiana C	0.2	5.1	0.3	0.7	93.4
Louisiana St U &					
A&M C	0.1	6.2	0.1	1.4	87.7
Alexandria	0.3	10.4	0.6	0.9	87.7
Eunice	0.8	15.2	0.2	0.1	83.7
Medical Center	0.0	6.5	1.1	1.4	91.0
Shreveport	0.2	6.5	0.7	0.5	92.0
U of New Orleans	0.2	15.4	2.1	3.8	75.5
Louisiana Tech U	0.3	9.1	0.4	0.6	84.9
Loyola U in New Orleans	0.6	13.8	0.9	8.9	75.8
McNeese St U	0.2	14.4	0.6	0.6	83.5
Nicholls St U	0.3	13.3	0.0	1.3	83.2
NE Louisiana U	0.1	21.3	0.3	0.2	77.0
NW St U of Louisiana	0.6	19.8	0.7	1.7	75.1
Our Lady of Holy Cross C	0.4	15.2	1.2	2.3	80.0
Phillips C of Greater New Orleans	0.0	16.5	0.8	7.2	73.3
St Bernard Parish CC	2.5	2.8	1.8	3.9	89.0
St Joseph Seminary C	0.0	9.1	10.1	2.0	78.8
St Mary's Dominican C	0.2	18.9	0.4	2.7	71.5
SE Louisiana U	0.3	9.5	0.4	0.3	87.5
Southern U A&M C					
Main Campus	0.0	93.0	0.1	0.1	0.9
New Orleans	0.0	99.1	0.0	0.0	0.5
Shreveport-Bossier	0.0	99.8	0.0	0.0	0.2
Tulane U	0.5	4.2	1.0	4.7	83.6
U of SW Louisiana	0.1	15.3	0.1	0.5	72.5
Xavier U of Louisiana	0.0	95.3	0.0	0.2	2.6
MAINE					
Andover C	0.0	0.9	0.9	0.6	96.5
Bangor Theol Seminary	0.0	0.0	3.1	0.0	96.9
Bates C	0.0	1.5	0.9	0.2	96.3
Beal Business C	1.0	0.0	0.0	0.6	98.3
Bowdoin C	0.1	1.9	1.0	0.5	94.8
Casco Bay C	0.0	0.0	0.5	0.0	99.5
Central Maine Voc-Tech Inst	0.0	0.0	0.2	0.0	99.8
Colby C	0.1	1.1	0.8	0.9	95.6
C of the Atlantic	0.0	0.6	0.0	0.0	95.5
Eastern Maine Voc-Tech Inst	1.1	0.3	0.0	0.0	98.6
Husson C	1.0	1.0	0.2	0.5	95.0
Maine Maritime Academy	0.5	0.0	0.0	0.5	98.0
Nasson C	0.0	0.5	0.0	0.0	93.6
Northern Maine Voc-Tech Inst	0.5	0.0	0.1	0.3	98.8
Portland Sch Art	0.4	0.0	0.4	0.8	98.1
St Joseph's C	1.4	0.0	0.5	0.7	97.4
Southern Maine Voc-Tech Inst	0.5	2.1	0.2	0.3	96.8
Thomas C	0.0	0.0	0.0	0.0	99.1
Unity C	0.0	1.0	0.0	0.0	96.0
U of Maine					
Augusta	0.3	0.0	0.1	0.1	99.5
Farmington	0.1	0.0	0.0	0.1	99.8
Fort Kent	0.2	1.0	0.0	0.0	98.3
Machias	1.3	0.0	0.0	0.0	97.2
Orono	0.6	0.2	0.3	0.2	98.6
Presque Isle	0.2	0.5	0.1	0.2	98.0
U of Southern Maine	0.5	0.2	0.3	0.1	98.8
U of New England	0.0	0.3	0.0	0.0	98.9
Westbrook C	0.0	0.4	0.1	0.1	99.2
MARYLAND					
Allegany CC	0.0	1.6	0.1	0.0	93.9
Anne Arundel CC	0.4	6.7	1.2	1.2	90.1
Bowie St C	0.1	79.1	0.4	0.4	16.1
Capitol Inst of Tech	0.4	12.5	15.9	1.4	51.9
Catonsville CC	0.2	13.6	1.3	0.4	75.6
Cecil CC	1.4	5.5	0.3	0.3	92.3
Charles County CC	0.2	9.0	1.3	0.7	55.0
Chesapeake C	0.1	8.3	0.4	0.4	90.4
C of Notre Dame	0.0	12.3	1.2	2.7	82.2
Columbia Union C	0.8	28.2	4.0	5.8	58.5
CC of Baltimore	0.0	70.5	0.1	4.1	18.6
Coppin St C	0.4	94.2	0.1	0.1	2.6
Dundalk CC	0.4	8.4	0.3	0.4	90.2
E Christian C	0.0	2.6	0.0	0.0	97.4
Essex CC	0.5	5.8	0.7	0.8	89.5
Frederick CC	0.3	5.3	0.7	0.4	92.7
Frostburg St C	0.1	8.4	0.0	0.5	90.6
Garrett CC	0.0	3.0	0.3	0.2	96.5
Goucher C	0.1	7.1	2.8	2.4	85.3
Hagerstown JC	0.2	6.8	0.9	0.4	90.7
Harford CC	0.2	8.0	1.0	0.8	90.0
Hood C	0.0	3.0	0.7	0.1	96.0
Howard CC	0.6	9.5	2.2	0.7	89.7
Johns Hopkins U	0.1	4.3	5.9	1.2	86.2
Loyola C	0.7	5.3	1.5	1.3	88.3
Maryland C Art & Design	2.6	25.6	1.3	2.6	66.7
Maryland Inst C of Art	0.0	10.1	1.9	2.2	82.7
Maryland Medical Secretarial Sch	0.0	6.4	2.1	0.0	91.5
Montgomery C					
Germantown	0.4	3.3	1.7	0.9	88.1
Rockville	0.1	5.0	3.2	2.1	71.4
Takoma Park	0.3	27.5	5.5	5.6	49.5
Morgan St U	0.2	92.1	0.2	0.2	2.5
Mt St Mary's C	0.0	2.4	0.0	0.0	97.1
Ner Israel Rabbinical C	0.0	0.0	0.0	0.0	100.0
Peabody Inst of Johns Hopkins U	0.9	3.3	5.1	2.8	79.0
Prince George's CC	0.4	35.5	2.6	1.3	58.4
St John's C	0.0	0.8	0.3	0.6	96.9
St Mary's C of Maryland	0.0	5.1	0.8	0.8	93.0
St Mary's Seminary & U	0.0	17.4	0.0	0.0	82.6
Salisbury St C	0.3	7.8	0.5	0.5	90.0
Sojourner-Douglas C	0.0	96.9	0.0	0.0	0.6
Towson St U	0.1	11.2	0.7	0.7	85.9
U of Baltimore	0.2	23.0	0.8	0.5	72.7
U of Maryland					
College Park	0.4	7.7	3.6	1.9	79.3
Baltimore County	0.3	17.9	3.2	1.4	74.0
Baltimore Professional Schs	0.0	7.4	5.9	0.6	85.4
Eastern Shore	0.0	80.4	1.7	0.2	14.2
University C	0.4	16.4	2.4	1.6	77.6
Villa Julie C	0.2	18.9	0.9	0.4	76.9
Washington Bible C	0.4	20.7	5.6	0.8	68.3
Washington C	0.1	0.7	0.9	0.3	97.6
Western Maryland C	0.0	2.3	0.6	0.7	95.3
Wor-Wic Tech CC	0.0	21.4	0.2	0.3	78.1
MASSACHUSETTS					
American International C	0.1	5.6	0.3	0.5	91.9
Amherst C	0.0	5.6	3.1	1.7	87.5
Anna Maria C	0.2	0.4	0.6	1.0	95.1
Aquinas JC					
Milton	0.0	0.7	0.0	0.0	99.3-
Newton	0.0	0.6	0.0	0.0	99.4

	American Indian	Black	Asian	Hispanic	White
MASSACHUSETTS—Continued					
Assumption C	0.6	0.5	0.5	0.5	97.9
Atlantic Union C	0.3	25.7	1.1	11.1	53.2
Babson C	0.0	1.9	0.0	0.0	89.9
Bay Path JC	0.1	2.8	0.7	1.2	94.9
Bay State JC of Business	0.0	29.8	1.8	5.6	58.5
Becker JC					
Leicester	0.0	2.3	0.0	1.0	96.1
Worcester	0.0	1.4	0.0	0.4	97.3
Bentley C	0.1	0.8	0.9	0.5	97.2
Berklee C of Music	0.2	9.7	1.0	1.9	71.3
Berkshire Christian C	0.0	0.0	0.0	0.0	97.7
Blue Hills Regional Tech Inst	0.0	0.0	0.4	1.0	98.7
Boston C	0.1	2.6	2.0	2.6	91.9
Boston Conservatory of Music	0.3	5.7	0.3	2.1	85.8
Boston U	0.2	4.6	1.7	1.8	85.6
Bradford C	1.7	4.8	0.0	2.5	81.2
Brandeis U	0.1	3.4	2.9	2.5	86.8
Central New England C of Tech	0.3	2.1	2.1	1.0	84.1
Chamberlayne JC	0.2	10.8	1.8	8.3	57.7
Clark U	0.0	2.6	0.6	0.9	92.9
C of Holy Cross	0.0	4.3	0.5	0.5	94.7
C of Our Lady of the Elms	0.0	1.5	0.4	1.5	96.7
Curry C	0.0	3.4	0.1	0.2	95.0
Dean JC	0.0	4.1	0.0	0.3	95.5
Eastern Nazarene C	0.0	4.7	0.8	1.6	89.9
Emerson C	0.2	5.7	0.1	1.8	89.7
Emmanuel C	0.3	2.6	0.2	2.0	91.6
Endicott C	0.0	0.1	0.0	0.0	95.9
Essex Ag & Tech Inst	0.8	0.8	0.3	0.2	98.0
Fisher JC	0.3	6.7	0.9	1.3	89.5
Forsyth Sch of Dental Hygienists	0.0	0.5	1.0	1.5	94.6
Franklin Inst of Boston	0.5	5.4	2.2	1.1	85.1
Gordon C	0.0	0.7	0.4	0.4	97.6
Hampshire C	0.1	3.2	1.1	1.6	93.7
Harvard U	0.3	5.2	4.1	3.5	81.3
Hebrew C	0.0	0.0	0.0	0.0	79.2
Hellenic C					
Holy Cross Sch	0.0	0.0	0.9	0.0	64.8
Katharine Gibbs Sch	0.0	0.3	1.0	0.5	96.4
Laboure JC	0.2	2.5	0.0	0.4	96.6
Lasell JC	0.0	0.8	0.2	0.8	97.1
Lesley C	0.1	3.8	0.3	1.4	93.4
Massachusetts Regents CC's					
Berkshire	0.2	2.5	0.3	0.4	96.3
Bristol	0.1	0.8	0.3	0.8	97.6
Bunker Hill	0.4	7.3	1.0	1.6	89.3
Cape Cod	0.5	0.9	0.1	1.8	96.6
Greenfield	0.1	0.9	0.3	0.5	97.7
Holyoke	0.5	1.2	0.3	0.7	97.3
Massachusetts Bay	0.0	1.7	0.4	0.1	97.8
Massasoit	0.3	3.4	0.1	0.9	95.2
Middlesex	0.0	0.6	0.1	0.3	98.8
Mt Wachusett	0.1	2.5	0.4	0.9	95.1
Northern Essex	0.4	0.6	1.7	2.0	94.0
North Shore	0.1	1.7	0.1	1.0	96.8
Quinsigamond	0.0	1.3	0.6	1.2	95.0
Roxbury CC	0.0	69.4	0.0	17.3	0.8
Springfield Tech	0.1	10.7	0.1	3.3	84.6
Massachusetts C of Pharmacy & Allied & Allied Health Sciences	0.5	1.3	1.8	3.0	82.2
Massachusetts Inst of Tech	0.3	5.4	5.3	2.5	76.5
Massachusetts St Cs					
Boston	0.6	13.3	1.2	2.1	78.5
Bridgewater	0.4	0.7	0.7	0.3	97.4
Fitchburg	0.2	2.5	0.3	1.4	95.2
Framingham	0.1	1.3	0.5	1.2	96.6
Massachusetts C of Art	0.0	3.4	1.0	0.9	93.6
Mass Maritime Acad	0.0	0.5	0.5	0.1	98.7
North Adams	0.3	0.4	0.3	0.2	98.4
Salem	0.1	2.0	0.2	0.5	96.7
Westfield	0.1	2.6	0.1	0.5	96.7
Worcester	0.0	1.5	0.2	0.8	94.4
Merrimack C	0.0	0.4	0.1	0.3	98.6
Mt Holyoke C	0.2	4.2	2.7	2.5	86.9
Mt Ida JC	0.0	12.8	0.1	1.9	80.9
Newbury JC	0.5	13.6	0.4	4.7	77.8
New England Conservatory of Music	0.2	4.5	2.1	0.4	86.4
New England Inst of Applied Arts	0.0	4.8	0.0	0.7	93.2
Nichols C	0.0	0.3	0.3	0.3	97.8
Northeastern U	0.3	3.8	1.3	0.7	90.8
Pine Manor C	0.0	1.5	0.6	2.9	73.7
Quincy JC	2.0	1.1	1.2	0.3	95.4
Radcliffe C	0.5	9.6	5.7	3.6	75.7
Regis C	0.0	1.0	0.9	4.3	91.1
St Hyacinth C-Seminary	0.0	2.0	0.0	0.0	96.1
St John's Seminary	0.0	2.4	0.0	2.4	95.2
Sch of the Museum of Fine Arts	0.0	1.0	1.3	0.8	91.9
Sch of the Worcester Art Museum	0.0	2.0	0.0	0.0	98.1
Simmons C	0.0	5.7	2.0	1.1	89.0
Simon's Rock Early C	0.0	4.2	2.3	0.4	92.0
Smith C	0.0	5.1	3.5	1.3	86.3
SE Massachusetts U	0.2	2.5	0.6	0.4	94.7
Springfield C	0.1	5.1	0.1	1.1	93.2
Stonehill C	0.1	0.8	0.1	0.2	98.5
Suffolk U	0.1	2.8	0.8	0.5	95.2
Swain Sch of Design	0.6	1.7	0.0	0.0	97.7
Tufts U	0.0	5.5	3.5	1.3	87.1
U of Lowell	0.1	0.7	1.2	0.6	96.0
U of Massachusetts					
Amherst	0.2	3.5	0.8	1.5	92.9
Boston	0.3	9.1	1.4	3.0	82.9
Wellesley C	0.0	6.9	5.8	2.7	79.8
Wentworth Inst	0.2	4.3	1.7	1.2	83.3
Western New England C	0.0	3.9	0.3	1.0	93.8
Wheaton C	0.0	2.0	1.6	1.8	92.9
Wheelock C	0.0	5.3	0.3	1.0	91.2
Williams C	0.1	7.1	2.5	2.4	85.7
Worcester JC	0.1	1.7	1.0	1.1	85.4
Worcester Poly Inst	0.0	0.5	1.1	0.5	93.0
MICHIGAN					
Adrian C	0.0	4.7	1.5	0.1	93.7
Albion C	0.2	1.7	0.6	0.3	96.4
Alma C	0.5	1.1	0.3	0.8	96.4
Alpena CC	0.1	2.9	0.5	0.2	95.9
Andrews U	0.4	13.8	3.5	4.8	64.5
Aquinas C	0.0	3.2	0.3	0.9	93.1
Baker JC of Business	0.2	22.7	0.2	1.9	75.0
Bay de Noc CC	2.0	0.0	0.1	0.2	97.5
Calvin C	0.2	0.8	0.3	0.2	89.9
Center for Creative Studies	0.1	8.4	1.1	1.1	88.6
Central Michigan U	0.4	1.5	[illegible]	0.5	96.7

	American Indian	Black	Asian	Hispanic	White
MICHIGAN—Continued					
Charles S Mott CC	0.7	15.4	0.6	0.9	82.4
Cleary C	0.3	15.2	0.0	0.3	83.3
Concordia C	0.2	2.9	0.0	0.0	92.8
Cranbrook Acad of Art	0.0	0.0	0.0	0.0	50.0
Davenport C of Business	0.5	7.6	0.3	1.5	89.9
Delta C	0.4	7.7	0.3	4.1	87.0
Detroit Bible C	0.6	19.0	0.0	0.6	78.2
Detroit C of Business	0.8	44.9	0.3	1.4	52.5
Detroit Inst Tech	0.4	50.9	2.3	1.5	17.0
Eastern Michigan U	0.3	7.2	0.4	0.8	88.7
Ferris St C	0.3	4.1	0.2	0.3	95.0
General Motors Inst	0.3	8.9	5.4	2.4	76.9
Glen Oaks CC	0.6	2.5	0.8	0.7	95.4
Gogebic CC	0.5	13.1	0.0	0.7	85.7
Grace Bible C	0.0	1.3	0.0	0.6	97.5
Grand Rapids Baptist C & Seminary	0.0	1.2	0.1	0.4	97.4
Grand Rapids JC	0.4	7.2	0.9	1.3	88.4
Grand Valley St C	0.4	5.2	0.5	0.6	91.9
Great Lakes Bible C	1.1	2.3	0.6	0.6	95.4
Henry Ford CC	1.3	10.8	0.9	1.7	85.3
Highland Park CC	0.1	95.6	0.1	0.2	3.2
Hillsdale C	0.0	3.7	2.2	1.5	87.9
Hope C	0.1	1.2	0.7	0.7	95.0
Jackson CC	0.4	9.4	0.3	0.8	89.2
Jordan C	0.2	56.6	0.2	0.6	42.5
Kalamazoo C	0.1	1.8	1.1	0.6	94.7
Kalamazoo Valley CC	0.6	7.1	1.3	0.7	87.4
Kellogg CC	0.6	7.5	0.3	0.8	89.9
Kendall Sch of Design	0.2	2.4	0.4	0.7	96.1
Kirtland CC	0.5	1.8	0.0	0.0	97.7
Lake Michigan C	0.5	14.4	1.4	1.2	82.1
Lake Superior St C	1.7	0.6	0.4	0.3	86.1
Lansing CC	0.6	5.0	0.8	1.6	90.6
Lawrence Inst of Tech	0.8	6.6	1.1	1.2	84.3
Lewis C of Business	0.0	98.8	0.0	0.2	0.4
Macomb County CC					
Center	0.5	2.9	1.6	0.9	94.0
South	0.5	3.0	1.6	1.2	93.7
Madonna C	0.3	10.6	0.4	0.7	87.9
Marygrove C	0.0	64.9	0.2	0.6	33.2
Mercy C of Detroit	0.1	34.9	1.3	0.7	62.6
Michigan Christian C	0.0	14.2	1.9	0.6	81.4
Michigan St U	0.2	5.6	0.7	0.6	92.1
Michigan Tech U	0.4	0.4	0.4	0.4	96.2
Mid-Michigan CC	0.1	0.1	0.1	0.4	99.2
Monroe Co CC	0.9	0.5	0.1	0.2	98.1
Montcalm CC	0.0	13.5	0.2	0.0	86.3
Muskegon Business C	0.6	13.2	0.4	1.1	84.7
Muskegon CC	0.4	8.6	0.2	1.1	89.6
Nazareth C	0.4	4.4	0.7	1.1	92.8
North Central Michigan C	0.6	0.1	0.0	0.0	99.3
Northern Michigan U	1.3	2.7	0.3	0.4	95.0
NW Michigan C	0.5	0.3	0.1	0.3	98.8
Northwood Inst	0.0	5.6	0.3	0.1	92.9
Oakland CC	0.7	5.6	0.6	4.6	87.8
Oakland U	0.2	6.6	0.4	0.8	90.9
Olivet C	0.2	10.1	0.2	0.0	88.6
Reformed Bible C	0.6	2.2	2.2	3.9	69.3
Sacred Heart Seminary	0.0	0.0	0.0	0.0	100.0
Saginaw Valley St C	0.6	5.5	0.1	2.6	89.7
St Clair County CC	0.1	2.3	0.3	0.6	96.4
St Mary's C	0.0	0.7	2.0	0.0	96.7
Schoolcraft C	0.4	0.4	0.4	0.7	98.0
Shaw C at Detroit	0.0	98.9	0.0	0.0	0.7
Siena Heights C	0.5	6.2	0.5	3.6	86.3
Southwestern Mich C	0.7	9.2	0.2	0.6	88.4
Spring Arbor C	0.4	16.5	0.4	0.3	79.8
Suomi C	0.4	7.4	3.7	0.5	86.9
U of Detroit	0.0	27.6	1.6	2.7	64.1
U of Michigan					
Ann Arbor	0.5	5.0	2.5	1.1	88.0
Dearborn	0.5	5.7	0.7	0.8	89.3
Flint	0.8	11.7	0.8	1.1	84.6
Walsh C of Accountancy & Business Admin	0.2	1.7	1.2	0.2	96.7
Washtenaw CC	0.5	14.5	1.6	0.7	81.5
Wayne County CC	2.3	59.7	0.8	1.1	33.6
Wayne St U	1.1	27.8	1.5	1.8	66.8
Western Michigan U	0.2	5.7	0.3	0.5	89.3
West Shore CC	0.5	0.8	0.2	0.7	97.8
MINNESOTA					
Augsburg C	1.0	4.1	1.5	0.3	92.9
Bethany Lutheran C	0.0	1.2	0.0	0.0	96.5
Bethel C	0.1	0.5	0.8	0.5	97.7
Brown Inst	0.3	1.9	4.3	1.0	91.4
Carleton C	0.6	2.8	2.6	1.3	92.4
C of St Benedict	0.1	0.1	0.2	0.3	97.4
C of St Catherine	0.7	0.9	1.2	1.3	94.6
C of St Scholastica	2.0	0.9	0.5	0.5	96.1
C of St Teresa	0.5	0.5	0.2	3.4	92.3
C of St Thomas	0.2	0.6	0.7	0.5	97.3
Concordia C					
Moorhead	0.1	0.9	0.0	0.0	97.5
St Paul	0.1	7.9	0.1	0.1	87.9
Crosier Seminary	0.0	0.0	0.0	0.0	100.0
Dr Martin Luther C	0.1	0.0	0.0	0.0	99.4
Golden Valley Lutheran C	0.3	6.4	0.5	0.5	90.3
Gustavus Adolphus C	0.0	0.7	0.2	0.1	97.8
Hamline U	0.3	1.5	0.3	0.4	94.5
Macalester C	1.1	3.9	0.9	2.7	83.4
Medical Inst of Minnesota	1.0	2.6	0.5	0.0	95.9
Minneapolis C of Art & Design	0.9	1.9	1.7	0.7	93.3
Minnesota Bible C	1.1	0.0	0.0	0.0	98.9
Minnesota CC System					
Anoka-Ramsey	0.3	0.8	0.7	0.2	97.2
Austin	0.1	0.0	0.5	0.2	95.4
Brainerd	0.3	1.1	0.3	0.0	97.9
Fergus Falls	0.2	1.4	0.0	0.7	93.9
Hibbing	0.3	0.1	0.8	0.0	98.0
Inver Hills	0.2	0.7	0.1	0.3	98.3
Itasca	0.3	0.1	0.1	0.0	99.5
Lakewood	0.5	0.5	0.4	0.5	97.4
Mesabi	0.2	0.3	0.0	0.0	98.9
Minneapolis	0.7	4.9	2.5	1.6	90.0
Normandale	0.3	1.1	0.6	0.4	97.1
North Hennepin	0.0	0.4	0.2	0.1	98.9
Northland	0.6	2.1	1.3	0.2	95.5
Rainy River	5.9	0.6	0.4	0.0	89.2
Rochester	0.4	0.7	1.1	0.6	96.0
Vermilion	0.0	0.0	0.0	0.0	99.8
Willmar	0.2	0.2	0.4	0.0	96.7
Worthington	0.2	0.3	0.0	0.2	99.4
North Central Bible C	0.4	3.3	0.4	0.4	95.1
Northwest Tech Inst	2.4	0.0	0.0	0.0	97.6
Northwestern C	0.2	1.1	0.7	0.2	96.3
NW Electronics Inst	0.4	2.6	5.3	0.1	91.0
St John's U	0.0	0.3	0.6	0.5	97.1
St Mary's C	0.0	0.6	0.2	0.2	98.0
St Mary's JC	1.2	1.9	0.5	0.7	94.5
St Olaf C	0.2	0.5	0.8	0.1	97.8
St Paul Bible C	0.0	0.2	0.9	0.5	97.8

	American Indian	Black	Asian	Hispanic	White
MINNESOTA—Continued					
Sch of Associated Arts	0.0	0.0	0.0	0.0	100.0
Bemidji St U	4.1	0.4	0.2	0.2	93.6
Mankato St U	0.2	0.8	0.3	0.3	96.0
Metropolitan St U	0.6	1.8	0.2	0.6	96.8
Moorhead St U	0.1	0.3	0.3	0.3	97.0
St Cloud St U	0.3	0.3	0.3	0.1	96.7
Southwest St U	0.3	0.3	0.0	0.4	79.6
Winona St U	0.2	0.2	0.1	0.2	97.1
U of Minnesota					
Duluth	1.0	0.7	0.4	0.4	96.1
Minneapolis-St Paul	0.4	1.6	1.7	0.7	93.9
Morris	1.9	3.3	0.1	0.3	93.0
Tech C at Crookston	0.6	0.3	0.2	1.8	95.4
Tech C at Waseca	0.0	0.0	0.1	0.0	97.4
MISSISSIPPI					
Alcorn St U	0.0	96.9	0.0	0.0	3.1
Belhaven C	0.0	5.4	0.0	0.0	94.6
Blue Mountain C	1.0	1.7	0.3	0.0	96.3
Clarke C	0.0	1.2	0.0	0.0	98.8
Coahoma JC	0.0	95.2	0.0	0.0	4.8
Copiah-Lincoln JC	0.0	25.9	0.0	0.0	74.1
Delta St U	0.0	17.1	0.5	0.0	82.3
East Central JC	2.8	23.8	0.0	0.0	73.4
East Mississippi JC	0.1	31.6	0.3	0.4	67.0
Hinds JC	0.1	23.0	0.3	0.2	76.3
Holmes JC	0.0	28.4	0.1	0.0	71.6
Itawamba JC	0.0	15.7	0.0	0.0	84.3
Jackson St U	0.2	94.8	0.1	0.1	1.4
Jones County JC	0.1	23.9	0.1	0.1	75.6
Mary Holmes C	0.0	97.1	0.2	0.0	0.0
Meridian JC	1.5	23.1	0.5	0.7	73.8
Millsaps C	0.0	5.9	1.1	0.4	92.0
Mississippi C	0.2	6.1	0.1	0.1	92.9
Mississippi Delta JC	0.1	37.7	0.6	0.1	61.4
Mississippi Gulf Coast JC	0.1	12.2	0.4	0.4	87.0
Mississippi Industrial C	0.0	98.7	0.0	0.0	1.3
Mississippi St U	0.2	11.6	0.2	0.1	86.3
Mississippi U for Women	0.3	19.3	0.5	0.1	79.2
Mississippi Valley St U	0.0	99.8	0.0	0.0	0.2
Northeast Mississippi JC	0.0	11.6	0.3	0.1	88.0
Northwest Mississippi JC	0.0	35.6	0.0	0.7	63.7
Pearl River JC	0.4	24.3	0.0	0.1	74.8
Phillips C	0.0	31.5	0.6	0.0	67.8
Phillips C of Jackson	0.0	48.7	0.0	0.0	51.3
Prentiss Normal & Industrial Inst	0.0	100.0	0.0	0.0	0.0
Rust C	0.0	99.9	0.0	0.1	0.0
Southwest Mississippi JC	0.0	21.1	0.0	0.0	78.4
Tougaloo C	0.0	96.2	0.0	0.0	0.4
U of Mississippi					
Main Campus	0.1	7.1	0.6	0.1	90.4
Medical Center	0.0	12.6	0.8	0.0	86.6
U of Southern Mississippi	0.4	11.0	0.5	0.4	87.8
Utica JC	0.0	99.2	0.0	0.1	0.3
Wesley C	0.0	4.4	0.0	0.0	95.6
William Carey C	0.1	29.7	0.0	0.2	65.5
Wood JC	0.0	6.4	0.0	0.0	87.8
MISSOURI					
Avila C	0.2	10.4	0.4	1.9	86.4
Baptist Bible C	0.3	0.6	0.5	0.8	97.7
Basic Inst of Tech	0.0	7.8	0.0	1.8	90.4
Calvary Bible C	0.7	1.9	0.5	0.5	96.0
Cardinal Glennon C	0.0	1.2	1.2	0.0	97.6
Cardinal Newman C	0.0	1.0	0.0	5.1	90.8
Central Bible C	0.4	0.4	0.0	0.3	97.7
Central Christian C of the Bible	0.9	1.8	0.0	0.0	97.3
Central Methodist C	0.0	5.3	0.0	0.0	94.5
Central Missouri St U	0.0	6.8	0.2	0.4	91.9
Columbia C	0.5	17.6	0.5	2.8	74.8
Conception Seminary C	0.0	1.1	9.8	3.3	85.9
Cottey C	0.0	0.6	1.3	0.6	93.0
Crowder C	0.9	1.4	0.5	0.2	97.0
Culver-Stockton C	0.3	6.1	0.0	0.0	93.4
Drury C	0.1	3.5	0.3	0.5	93.7
E Central Mo District JC	0.1	1.0	0.0	0.1	98.7
Evangel C	0.3	1.4	0.3	1.3	95.8
Fontbonne C	0.0	14.5	0.9	1.0	77.5
Hannibal-LaGrange C	0.0	4.8	0.0	0.3	94.9
Harris-Stowe St C	0.4	84.4	0.1	0.3	13.9
Jefferson C	0.3	0.7	0.1	0.1	98.8
Kansas City Art Inst	1.1	3.7	1.1	1.1	91.9
Kemper Military Sch & C	0.0	13.1	28.7	1.6	52.5
Lincoln U	0.4	41.3	0.2	2.3	47.8
Lindenwood C's	0.6	5.3	0.5	0.1	86.6
Maryville C-St Louis	0.1	8.6	0.3	0.5	89.5
Metropolitan CC's					
Longview CC	0.4	4.0	0.2	0.9	93.5
Maple Woods CC	0.5	0.9	0.5	1.5	96.4
Penn Valley CC	0.3	36.1	1.8	3.6	52.4
Pioneer CC	1.0	63.9	2.4	0.5	31.7
Mineral Area C	0.0	0.8	0.5	0.1	98.5
Missouri Baptist C	0.0	5.7	0.2	0.0	92.8
Missouri Inst of Tech	0.4	6.9	0.6	0.9	90.6
Missouri Southern St C	1.4	1.7	0.4	0.4	96.2
Missouri Valley C	0.0	19.0	0.4	2.1	76.7
Missouri Western St C	0.5	3.8	0.2	0.9	94.2
Moberly JC	0.3	15.1	0.2	0.3	83.5
Northeast Missouri St U	0.1	4.6	0.3	0.5	90.8
Northwest Missouri St U	0.8	1.3	0.1	0.6	95.3
Park C	0.3	25.6	2.6	3.4	66.9
Rockhurst C	0.1	10.2	0.7	2.4	86.2
St Louis Christian C	0.0	2.1	0.0	0.0	97.9
St Louis C of Pharmacy	0.1	1.6	1.5	0.3	95.6
St Louis CC					
Florissant Valley	0.2	20.9	0.4	0.4	77.8
Forest Park	0.2	53.4	0.2	0.5	44.9
Meramec	0.3	3.6	0.3	0.4	95.4
St Louis Conservatory of Music	0.0	3.0	0.0	0.0	92.4
St Louis Rabbinical C	0.0	0.0	0.0	0.0	100.0
St Louis U					
Main Campus	0.2	12.3	1.3	1.3	84.1
Parks C	0.0	4.9	0.7	1.3	87.1
St Mary's C of O'Fallon	0.0	0.4	0.0	0.0	99.6
St Mary's Seminary & C	0.0	0.0	0.0	0.0	94.4
St Paul's C	0.0	0.9	0.0	0.0	99.1
Sch of the Ozarks	0.0	1.0	0.3	0.3	98.5
Southeast Missouri St U	0.2	3.8	0.3	0.3	94.5
Southwest Baptist C	0.2	0.2	0.0	0.2	99.2
Southwest Missouri St U	0.2	0.6	0.5	0.2	98.1
State Fair CC	1.9	2.8	0.3	0.8	94.2
Stephens C	0.2	5.6	0.4	0.9	92.1
Tarkio C	0.2	17.3	0.6	0.6	81.1
Three Rivers CC	0.0	4.4	0.0	0.0	95.6
Trenton JC	0.0	1.8	0.0	0.0	98.0
U of Missouri					
Columbia	0.3	3.7	0.6	0.7	92.3
Kansas City	0.4	9.6	1.3	1.3	85.3
Rolla	0.4	3.6	1.7	0.9	90.0
St Louis	0.3	11.6	0.8	0.6	86.5
Washington U	0.1	5.1	4.1	2.0	85.8
MISSOURI—Continued					
Webster C	0.2	18.3	0.2	0.6	78.4
Wentworth Military Acad	0.0	8.8	0.4	4.4	82.9
Westminster C	0.0	1.9	0.3	0.8	96.1
William Jewell C	0.1	2.4	0.6	0.5	96.4
William Woods C	0.3	3.3	0.2	0.4	95.4
MONTANA					
Big Sky Bible C	0.0	0.0	0.0	0.0	100.0
Blackfeet CC	96.0	0.0	0.0	0.0	4.0
Carroll C	1.5	0.0	0.5	0.1	96.3
C of Great Falls	9.8	1.6	0.6	1.0	83.3
Dawson CC	8.5	0.4	1.2	1.2	88.7
Dull Knife Memorial C	72.9	0.0	0.0	0.0	27.1
Flathead Valley CC	1.0	0.0	0.1	0.5	98.1
Miles CC	25.4	0.0	0.0	0.7	73.6
Montana U System					
Eastern Montana C	1.8	0.2	0.2	0.5	97.1
Montana C of Mineral Science & Tech	1.2	0.6	0.4	0.6	93.2
Montana St U	1.7	0.2	0.3	0.2	96.3
Northern Montana C	10.5	1.2	0.5	0.4	87.1
U of Montana	2.3	0.5	0.4	0.6	95.0
Western Montana C	0.8	0.3	0.1	0.0	98.8
Rocky Mountain C	3.2	1.2	0.0	0.0	90.3
Salish Kootenai CC	62.6	0.0	0.0	0.0	37.4
NEBRASKA					
Bellevue C	0.3	8.9	1.5	2.1	86.9
Central Tech CC Area	0.4	0.2	0.3	0.5	98.6
Chadron St C	0.5	0.4	0.8	0.1	98.2
C of St Mary	0.5	6.7	0.5	1.7	89.7
Concordia Teachers C	1.2	3.4	0.2	0.4	92.0
Creighton U	0.1	2.9	3.5	1.8	89.5
Dana C	0.2	3.9	0.0	0.2	94.3
Doane C	0.2	3.3	0.0	0.2	95.6
Grace C of the Bible	0.2	1.2	0.7	0.5	92.6
Hastings C	0.0	0.9	1.0	0.9	96.7
Kearney St C	0.1	0.3	0.2	0.5	98.3
Metropolitan Tech CC	5.3	10.0	0.9	1.7	82.0
Midland Lutheran C	0.0	2.9	0.1	0.4	95.4
McCook CC	0.0	1.1	0.0	0.0	96.8
Mid-Plains CC	0.7	0.1	0.1	2.3	96.8
Nebraska Christian C	0.0	1.0	0.0	0.0	98.1
Nebraska Wesleyan U	0.2	1.7	0.8	0.4	92.4
Nebraska Western C	0.8	1.0	0.4	7.2	90.6
Northeast Tech CC	0.2	0.0	0.0	0.1	99.6
Peru St C	0.7	11.8	0.2	0.0	86.4
Platte Valley Bible C	0.0	0.0	0.0	7.1	92.9
Southeast CC					
Fairbury-Beatrice	0.0	6.3	0.0	0.0	87.0
Lincoln	0.5	1.4	1.0	0.9	95.5
Milford	0.1	0.4	0.4	0.4	98.7
Union C	0.1	4.7	1.1	1.3	83.7
U of Nebraska					
Lincoln	0.3	1.6	0.5	0.7	94.7
Medical Center	0.1	1.1	0.6	0.6	97.2
Omaha	0.4	6.3	0.5	1.3	90.6
Wayne St C	0.2	0.6	0.1	0.1	98.6
York C	0.3	3.7	0.9	1.4	92.3
NEVADA					
Sierra Nevada C	0.0	0.0	0.0	0.0	79.2
U of Nevada					
Las Vegas	0.4	5.7	2.8	3.5	85.9
Reno	1.1	1.8	1.9	1.6	90.3
Clark County CC	2.0	19.4	2.8	6.2	68.4
N Nevada CC	4.0	0.0	0.0	1.4	94.7
Truckee Meadows CC	3.1	2.2	3.6	3.5	87.2
Western Nevada CC	2.6	0.5	1.4	2.1	93.2
NEW HAMPSHIRE					
Castle JC	0.0	0.0	0.0	0.0	100.0
Colby-Sawyer C	0.0	1.3	0.0	0.4	97.3
Daniel Webster C	0.9	2.7	0.9	2.0	92.4
Dartmouth C	1.3	7.7	1.5	0.4	86.2
Franklin Pierce C	0.1	3.8	0.2	1.3	94.5
Hesser C	0.1	1.0	0.1	0.3	97.8
McIntosh C	0.0	1.1	0.3	0.0	98.6
Nathaniel Hawthorne C	0.0	0.7	0.0	0.4	95.2
New England C	0.0	0.8	0.0	0.2	85.4
New Hampshire C	0.1	5.2	0.1	2.0	92.1
New Hampshire Tech Inst	0.2	0.3	0.2	0.1	98.9
New Hampshire Voc-Tech C					
Berlin	0.0	0.2	0.0	0.0	99.8
Claremont	0.0	0.3	0.0	0.0	99.5
Laconia	0.0	0.0	0.0	1.2	98.8
Manchester	0.0	0.5	0.3	0.3	98.9
Nashua	0.0	0.5	0.2	0.3	98.8
Portsmouth	0.0	0.6	0.0	2.2	97.2
Notre Dame C	0.3	0.2	0.0	1.2	98.1
Rivier C	0.1	1.0	0.5	0.1	97.6
St Anselm's C	0.1	0.2	0.2	0.4	98.8
U of New Hampshire					
Main Campus	0.1	0.2	0.2	0.4	98.6
Keene St C	0.3	0.2	0.4	0.2	98.4
Plymouth St C	0.2	0.5	0.1	0.4	98.1
White Pines C	0.0	1.3	0.0	0.0	98.7
NEW JERSEY					
Assumption C	0.0	0.0	32.0	0.0	68.0
Atlantic CC	0.3	17.5	0.4	3.0	78.4
Bergen CC	0.3	3.3	1.5	3.3	89.0
Berkeley Sch	0.0	10.5	0.0	0.0	89.5
Beth Medrash Govoha	0.0	0.0	0.0	0.7	79.7
Bloomfield C	0.0	46.1	0.4	3.6	49.1
Brookdale CC	0.1	7.8	1.7	2.3	88.1
Burlington County C	0.3	15.3	1.2	1.9	81.4
Caldwell C	0.0	8.2	0.6	6.1	80.1
Camden County C	0.0	14.9	1.0	2.6	81.4
Centenary C	0.4	3.7	0.7	1.1	93.7
College of Medicine & Dentistry of N J	0.0	44.4	2.1	6.9	46.5
C of St Elizabeth	0.0	8.4	1.3	4.9	82.6
County C of Morris	0.1	0.8	0.7	0.9	97.4
Cumberland County C	0.9	15.5	1.0	9.1	73.4
Don Bosco C	0.0	0.0	4.1	5.5	84.9
Drew U	0.1	5.2	0.7	2.4	90.0
Essex County C	0.3	66.0	5.0	15.6	12.1
Fairleigh Dickinson U					
Edward Williams C	0.2	15.1	1.2	7.4	73.7
Madison	0.6	4.1	0.7	1.0	93.1
Rutherford	0.2	6.9	1.1	6.7	84.4
Teaneck	0.4	5.6	2.2	5.0	81.9
Felician C	0.2	4.9	1.6	1.9	90.2
Georgian Court C	0.1	8.4	1.4	4.2	85.9
Glassboro St C	0.3	8.3	1.3	2.7	87.1
Gloucester County C	0.0	3.9	0.2	0.3	95.5
Hudson County CC	0.0	27.9	2.5	32.4	35.8
Jersey City St C	0.3	20.9	2.6	13.1	59.5
Katharine Gibbs Sch	0.3	6.6	0.0	2.2	90.9
Kean C of New Jersey	0.2	11.4	0.7	8.1	76.8
Mercer County CC	0.0	18.1	1.2	3.0	77.0
Middlesex County C	0.4	5.0	2.1	4.0	87.6
Monmouth C	0.2	3.4	0.8	0.8	94.7
NEW JERSEY—Continued					
Montclair St C	2.0	4.8	0.6	6.2	85.2
New Jersey Inst of Tech	0.0	6.6	4.3	5.7	82.2
NE Bible C	0.4	8.1	0.8	2.3	86.0
Ocean County C	0.3	2.0	0.6	1.6	95.6
Passaic County CC	0.3	33.2	1.9	40.0	23.6
Princeton U	0.3	7.5	3.2	4.8	79.8
Rabbinical C of America	0.0	0.0	0.0	0.0	79.1
Ramapo C of New Jersey	0.3	6.3	0.7	2.4	88.7
Rider C	1.3	4.6	0.4	1.0	91.8
Rutgers U					
Camden	0.3	14.3	0.7	2.6	82.0
Newark	0.1	27.3	1.4	9.4	61.1
New Brunswick	0.1	10.2	2.6	3.5	82.6
St Peter's C	0.5	10.3	1.8	14.7	72.0
Salem CC	1.0	20.5	0.5	1.1	76.9
Seton Hall U	0.2	9.6	0.3	1.8	87.0
Somerset County C	0.0	2.5	1.2	0.7	95.6
Stevens Inst of Tech	0.0	3.2	6.7	6.0	79.5
Stockton St C	0.1	5.9	0.4	1.2	91.2
Talmudical Inst of Central Jersey	0.0	0.0	0.0	0.0	100.0
Trenton St C	0.3	7.4	0.7	1.1	90.4
Union C	0.1	7.3	0.4	2.4	89.5
Union County Tech Inst	0.1	11.0	1.9	4.8	82.2
Upsala C	0.2	20.1	1.3	4.4	73.0
Westminster Choir C	0.0	6.7	0.6	0.9	89.2
William Paterson C	0.1	6.1	0.7	2.7	90.3
NEW MEXICO					
C of Santa Fe	10.8	2.7	0.7	37.5	47.3
C of the Southwest	0.0	2.9	0.0	16.1	81.0
E New Mexico U					
Main Campus	2.1	5.9	0.6	14.8	75.1
Roswell	1.2	3.5	0.6	24.0	70.5
Inst of American Indian Arts	98.7	0.0	0.0	0.0	0.0
New Mexico Highlands U	0.9	0.9	0.1	76.8	18.7
New Mexico Inst of Mining & Tech	1.5	1.4	1.3	7.8	83.4
New Mexico JC	0.4	4.2	0.6	9.4	85.2
New Mexico Military Inst	0.3	8.5	3.4	17.3	68.1
New Mexico St U					
Main Campus	2.2	1.6	0.4	26.1	66.2
Alamogordo	2.5	2.5	1.2	16.0	77.6
Carlsbad	0.2	1.2	0.2	19.9	78.5
Grants Branch	7.5	0.0	0.5	28.4	63.7
San Juan	15.9	0.0	0.4	7.8	75.9
N New Mewxico CC	3.6	0.2	0.1	68.5	27.6
U of Albuquerque	6.2	6.1	2.3	28.5	56.9
U of New Mexico					
Main Campus	3.2	2.1	1.1	24.3	68.0
Gallup	53.6	0.9	1.4	16.4	27.7
W New Mexico U	3.3	4.4	0.5	39.7	52.1
NEW YORK					
Acad of Aeronautics	0.0	12.9	6.1	18.2	62.8
Adelphi U	0.1	13.0	1.3	3.9	81.6
Albany Business C	0.0	13.8	0.0	0.9	84.7
Albany C of Pharmacy	0.2	0.5	0.3	0.3	98.3
Alfred U	0.2	1.1	0.2	0.1	97.8
N Y St C of Ceramics	0.2	0.2	0.3	0.0	97.6
American Acad of Dramatic Arts	0.2	7.1	0.2	2.0	85.1
Associated Beth Rivkah Schs	0.0	0.0	0.0	0.0	88.4
Bard C	0.0	6.1	0.3	3.3	87.5
Be'er Shmuel Talmudical Acad	0.0	0.0	0.0	0.0	100.0
Belzer Yesh-Machzikei Seminary	0.0	0.0	0.0	0.0	100.0
Berk-Claremont New York	0.0	28.2	0.5	28.3	41.6
The Berkeley School	0.0	9.2	0.1	2.5	88.2
Berkeley School-Hicksville	0.0	7.0	0.0	0.2	91.9
Beth Hamedrash Shaarei Yosher Inst	0.0	0.0	0.0	0.0	100.0
Beth Hatalmud Rabbinical C	0.0	0.0	0.0	0.0	100.0
Beth Jacob Hebrew Teachers C	0.0	0.0	0.0	0.0	100.0
Beth Medrash Emek Halacha Rabbinical C	0.0	0.0	0.0	0.0	100.0
Beth Medrash Eyun Rabbinical C	0.0	0.0	0.0	0.0	100.0
Beth Rochel Seminary	0.0	0.0	0.0	0.0	100.0
Boricua C	0.0	4.9	0.0	95.1	0.0
Bramson ORT Tech Inst	0.0	3.8	2.4	1.4	81.7
Bryant-Stratton Business Inst					
Rochester	0.7	16.4	0.2	2.0	80.8
Buffalo	0.7	16.9	0.3	0.9	81.2
Canisius C	0.2	1.0	0.0	0.0	98.4
Cathedral C of Immaculate Conception	0.0	6.1	0.0	7.0	86.8
Cazenovia C	0.9	4.9	0.4	0.2	93.0
Central City Business Inst	0.0	10.7	0.0	0.0	89.3
Central Yeshiva Tomchei Tmimim Lubavitz	0.0	0.0	0.0	0.0	100.0
City U of New York					
Bernard Baruch C	1.0	24.0	10.0	15.5	47.8
Manhattan CC	1.0	52.7	5.1	25.9	14.1
Bronx CC	1.0	51.3	2.1	36.5	8.1
Brooklyn C	0.8	22.2	3.4	7.2	65.4
City C	1.1	37.8	9.0	25.0	24.7
Staten Island	1.2	10.4	1.5	5.0	81.3
Hostos CC	1.3	15.2	0.6	82.3	0.1
Hunter C	1.6	23.9	4.4	16.4	51.7
John Jay C of Criminal Justice	0.9	35.0	1.4	21.9	39.7
Kingsborough CC	1.3	20.8	1.8	8.5	66.7
LaGuardia CC	1.0	41.1	2.6	32.7	21.9
Lehman C	0.9	29.8	1.9	28.6	38.3
Medgar Evers C	0.7	88.3	1.2	7.5	0.9
New York City Tech	1.3	46.9	6.4	19.5	24.9
Queensborogh CC	1.0	19.5	4.2	12.2	62.1
Queens C	0.9	8.7	5.5	6.7	75.4
York C	1.4	61.5	3.9	15.0	17.1
Clarkson C of Tech	0.2	0.1	0.3	0.3	98.1
Colgate U	0.1	4.5	2.9	2.6	88.1
C of Human Services	0.7	77.9	2.1	13.1	6.2
C of Insurance	0.0	8.9	2.5	2.9	80.8
C of Mt St Vincent	0.0	2.2	1.3	9.5	86.1
C of New Rochelle	0.1	51.7	0.8	11.7	35.5
C of St Rose	0.0	2.2	0.1	0.3	97.4
Columbia U	0.1	6.2	8.9	6.2	73.9
Barnard C	0.0	3.5	8.7	4.3	83.5
Concordia C	0.0	11.5	0.8	2.8	82.0
Cooper Union	0.0	2.3	9.7	2.3	84.5
Cornell U					
Endowed C's	0.2	5.0	6.4	3.3	81.4
Statutory C's	0.4	9.7	2.2	2.8	84.1
Culinary Inst of America	0.0	2.5	0.4	1.5	95.3
Daemen C	0.4	16.9	0.4	2.3	79.6
Darkei No'am Rabbinical C	0.0	0.0	0.0	0.0	100.0
Dominican C of Blauvelt	0.0	1.9	0.3	1.4	96.1
NEW YORK—Continued					
Dowling C	0.2	3.9	0.0	2.3	92.7
D'Youville C	0.6	12.0	0.6	4.2	81.7
Elizabeth Seton C	0.1	32.2	4.5	8.2	55.1
Elmira C	0.2	2.4	0.4	0.5	94.7
Five Towns C	0.0	25.8	0.8	3.7	69.1
Fordham U	0.3	12.4	0.8	9.6	76.7
Friends World C	1.3	11.6	0.6	3.9	88.4
Gruss Girls Seminary	0.0	0.0	0.0	0.0	100.0
Hamilton C	0.1	2.0	0.7	0.6	93.3
Harriman C	0.9	15.7	0.0	5.0	76.7
Hartwick C	0.0	1.0	0.3	0.6	97.0
Hilbert C	0.8	3.3	0.0	1.6	94.3
Hobart-Smith C's	0.0	3.1	0.2	0.9	95.2
Hofstra U	0.0	2.7	0.5	1.3	94.4
Holy Trinity Orthodox Seminary	0.0	0.0	0.0	0.0	100.0
Houghton C	1.1	1.3	0.4	0.5	92.7
Inst of Design & Construction	0.0	39.0	3.3	8.2	48.4
Interboro Inst	1.1	51.1	0.7	22.8	23.1
Iona C	0.1	5.9	0.5	4.0	89.0
Ithaca C	0.4	2.2	0.3	0.8	95.9
Jamestown Business C	0.4	1.4	0.7	0.0	97.5
Jewish Theol Seminary	0.0	0.0	0.0	0.0	92.8
Juilliard Sch	0.5	5.0	6.2	1.7	69.7
Katharine Gibbs Sch	0.0	2.3	0.6	2.6	94.2
Kehilath Yakov Rabbinical Seminary	0.0	0.0	0.0	0.0	100.0
Keuka C	0.9	4.0	0.6	1.1	93.4
King's C	0.0	6.3	0.6	5.7	86.9
Laboratory Inst of Merchandising	0.0	11.2	1.8	5.0	81.3
LeMoyne C	0.1	1.8	0.3	0.9	96.5
Long Island C Hosp Sch Nursing	0.0	27.4	1.1	5.3	49.5
Long Island Seminary of Jewish Studies	0.0	0.0	0.0	0.0	100.0
Long Island U					
Brooklyn Center	0.2	47.2	3.9	11.5	30.6
C W Post Center	0.2	8.1	1.0	3.1	86.1
Southampton Center	0.1	8.1	0.4	2.2	88.1
Machzikei Hadath Rabbinical C	0.0	0.0	0.0	0.0	100.0
Manhattan C	0.4	1.6	0.9	3.9	84.9
Manhattan Sch of Music	0.5	3.6	4.3	2.6	79.4
Manhattanville C	0.0	4.7	0.9	6.1	83.8
Mannes C of Music	0.0	2.9	2.4	1.2	77.6
Maria C	0.0	2.3	0.3	0.5	96.8
Maria Regina C	0.4	6.0	0.2	3.6	88.3
Marist C	0.4	6.8	0.3	2.9	89.6
Marymount C	0.0	9.9	0.8	7.8	78.7
Marymount Manhattan C	0.3	19.8	2.5	12.7	63.7
Mater Dei C	26.7	0.0	0.0	0.0	73.3
Medaille C	2.3	39.6	0.2	1.5	56.5
Mercy C	2.1	20.2	0.3	12.5	55.4
Mesivta Torah Vodaath Seminary	0.0	0.0	0.0	0.0	100.0
Mesivtha Tifereth Jerusalem of America	0.0	0.0	0.0	0.0	100.0
Mirrer Yeshiva Central Inst	0.0	0.0	0.0	0.0	100.0
Molloy C	0.0	4.0	0.4	1.1	94.5
Monroe Business Inst	0.4	55.2	0.1	35.5	8.3
Mt St Mary C	0.0	7.8	0.3	2.4	89.5
Nazareth C of Rochester	0.1	3.3	0.2	0.8	95.5
New Sch for Social Research	2.2	9.7	10.3	11.1	65.7
New York Inst of Tech					
Main Campus	0.1	3.5	0.5	1.4	90.7
New York	0.0	13.1	2.9	6.5	57.1
New York Sch of Interior Design	0.0	2.0	2.5	1.5	69.7
New York U	0.2	7.6	9.2	7.2	73.5
Niagara U	0.4	4.5	0.3	0.7	94.1
Nyack C	0.5	4.7	1.4	4.7	87.7
Ohel Shmuel Yeshiva	0.0	0.0	0.0	0.0	100.0
Ohr Hameir Theol Seminary	0.0	0.0	0.0	0.0	100.0
Olean Business Inst	0.5	0.0	0.0	0.0	99.5
Pace U					
Briarcliff	0.9	4.9	0.6	2.2	91.1
New York	0.5	20.1	5.3	10.9	61.5
White Plains	0.6	12.0	1.7	4.6	79.9
Parsons Sch of Design	0.5	6.9	5.0	5.2	78.6
Paul Smith's C	0.0	0.6	1.1	0.1	97.6
Polytech Inst of N Y	0.3	12.0	17.5	8.3	49.4
Powelson Business Inst	0.3	10.9	0.0	0.0	88.4
Pratt Inst	0.1	17.8	4.6	6.5	65.1
Rabbi Isaac Elchanan Theol Seminary	0.0	0.0	0.0	0.0	100.0
Rabbinical Acad Mesivta Chaim Berlin	0.0	0.0	0.0	0.0	100.0
Rabbinical C Beth Shraga	0.0	0.0	0.0	0.0	100.0
Rabbinical C Bobover B'nei Zion	0.0	0.0	0.0	0.0	100.0
Rabbinical C Ch'san Sofer	0.0	0.0	0.0	0.0	100.0
Rabbinical C of Kamenitz Yeshiva	0.0	0.0	0.0	0.0	100.0
Rabbinical C of L I	0.0	0.0	0.0	0.0	100.0
Rabbinical C of Sanz	0.0	0.0	0.0	0.0	100.0
Rabbinical Seminary Adas Yereim	0.0	0.0	0.0	0.0	100.0
Rabbinical Seminary of America	0.0	0.0	0.0	0.0	100.0
Rabbinical Seminary Beth Yit D'Spinka	0.0	0.0	0.0	0.0	100.0
Rabbinical Seminary M'kor Chaim	0.0	0.0	0.0	0.0	100.0
Rabbinical Seminary Munkacs	0.0	0.0	0.0	0.0	100.0
Rensselaer Poly Inst	0.0	3.3	2.2	2.6	89.9
Rika Breuer Teachers Seminary	0.0	0.0	0.0	0.0	96.8
Roberts Wesleyan C	0.8	4.2	0.7	2.0	90.2
Rochester Business Inst	0.0	24.2	0.0	1.9	72.9
Rochester Inst of Tech	0.3	3.7	0.9	0.8	93.6
Russell Sage C					
Main Campus	0.3	2.7	0.3	1.3	94.3
JC of Albany	0.3	9.4	0.0	1.2	87.1
St Bonaventure U	0.3	0.4	0.1	0.0	98.9
St Francis C	0.5	18.3	2.7	6.3	70.8
St John Fisher C	0.2	1.2	0.1	0.7	97.8
St John's U	0.1	5.3	2.0	3.3	84.4
St Joseph's C					
Main campus	0.0	51.3	5.9	7.3	34.7
Suffolk	0.0	3.0	0.3	7.2	89.2
St Lawrence U	0.0	2.0	0.0	0.0	96.6
St Thomas Aquinas C	0.0	6.3	0.0	9.0	84.4
Sarah Lawrence C	0.0	6.2	3.7	0.9	87.5
Sara Schenirer Teachers Seminary	0.0	0.0	0.0	0.0	100.0
Sch of Visual Arts	0.0	6.2	1.9	3.8	86.2

Continued on Following Page

FACT-FILE-Continued

	American Indian	Black	Asian	Hispanic	White
NEW YORK—Continued					
Sh'or Yoshuv Rabbinical C	0.0	0.0	0.0	0.0	100.0
Siena C	0.0	2.3	0.6	0.9	96.2
Skidmore C	0.1	4.5	0.8	1.5	91.9
St U of New York					
Albany	0.3	4.6	1.8	2.3	90.8
Binghamton	0.0	3.9	0.7	1.8	92.6
Buffalo					
Main Campus	0.5	7.4	2.8	1.2	84.6
Health Science Center	0.5	4.2	2.1	0.8	89.9
Stony Brook					
Main Campus	0.2	6.1	7.6	4.1	78.3
Health Science Center	0.9	4.0	1.7	3.0	90.3
Downstate Medical Center	0.0	10.6	2.3	2.1	82.9
Upstate Medical Center	0.4	2.0	0.8	0.0	96.8
C at Brockport	0.3	9.3	0.4	1.8	87.2
C at Buffalo	0.5	10.2	0.4	1.6	85.7
C at Cortland	0.2	1.8	0.3	0.9	96.1
C at Fredonia	0.2	1.8	0.3	0.7	96.0
C at Geneseo	0.4	1.1	0.2	0.8	97.3
C at New Paltz	4.4	11.4	1.0	3.8	75.4
C at Old Westbury	0.1	39.5	0.9	9.4	48.4
C at Oneonta	0.1	2.6	0.3	1.0	94.9
C at Oswego	1.1	0.9	0.9	0.6	95.9
C at Plattsburgh	0.5	2.0	0.5	1.2	94.4
C at Potsdam	1.4	0.6	0.0	1.1	97.0
C at Purchase	0.0	10.6	0.3	2.8	82.4
C at Utica-Rome	0.2	1.9	0.3	0.3	97.2
Empire State C	0.2	13.7	0.3	4.5	81.1
C of Environmental Science & Forestry	0.1	0.2	0.4	0.3	98.3
Maritime C	0.0	1.0	0.3	1.5	93.3
A&T C, Alfred	0.8	0.4	0.0	0.1	98.0
A&T C, Canton	0.7	1.1	0.0	0.0	97.9
A&T C, Cobleskill	0.1	1.3	0.0	0.4	97.5
A&T C, Delhi	0.1	1.5	0.3	0.8	96.6
A&T C, Farmingdale	0.2	3.4	0.8	1.3	92.9
A&T C, Morrisville	0.4	2.4	0.1	0.6	94.9
Adirondack CC	0.0	0.5	0.4	0.1	98.8
Broome CC	0.2	2.1	0.8	0.5	94.3
Cayuga County CC	0.0	3.6	0.1	0.2	96.0
Clinton CC	0.3	7.6	0.4	0.5	91.0
Columbia-Greene CC	1.1	4.8	0.5	0.8	91.5
CC Finger Lakes	0.3	1.7	0.1	0.1	97.6
Corning CC	0.3	3.7	0.2	0.5	95.2
Dutchess CC	0.4	6.6	1.0	1.7	90.0
Erie CC	0.2	10.0	0.1	0.4	87.6
Fashion Inst of Tech	0.0	17.0	8.5	1.6	64.7
Fulton-Montgomery CC	0.6	3.9	0.1	0.5	90.3
Genesee CC	0.0	4.0	0.0	0.3	95.6
Herkimer County CC	0.0	2.4	0.0	0.3	97.2
Hudson Valley CC	1.3	4.1	0.4	0.7	92.5
Jamestown CC	0.8	1.7	0.2	0.3	96.8
Jefferson CC	0.0	0.2	0.2	0.4	99.2
Mohawk Valley CC	0.0	2.8	0.2	0.8	95.7
Monroe CC	0.4	9.7	0.9	1.6	87.2
Nassau CC	1.1	5.8	0.6	2.6	89.8
Niagara County CC	1.2	3.9	0.0	0.3	94.4
N Country CC	2.1	0.1	0.3	0.0	97.4
Onondaga CC	0.3	3.0	0.5	0.3	95.8
Orange County CC	0.3	3.5	0.4	2.5	93.0
Rockland CC	0.3	11.1	2.4	3.5	81.2
Schenectady County CC	0.5	6.5	0.9	0.9	91.2
Suffolk County CC	0.2	1.6	0.2	1.6	96.4
Sullivan County CC	0.1	12.2	0.3	1.4	86.0
Tompkins-Cortland CC	0.0	1.5	0.6	0.5	96.2
Ulster County CC	0.3	7.1	0.3	2.5	89.7
Westchester CC	0.2	12.4	2.0	3.6	81.0
Stenotype Inst	0.3	34.3	0.5	15.4	49.6
Syracuse U					
Main Campus	0.2	7.5	0.9	1.7	85.4
Utica C	0.2	9.1	0.4	1.8	87.9
Talmudical Seminary Oholei Torah	0.0	0.0	0.0	0.0	100.0
Taylor Business Inst	0.0	45.9	5.1	36.6	9.8
Tech Career Insts	0.3	35.2	0.9	19.8	38.7
Tobe-Coburn Sch of Fashion Careers	0.0	5.2	0.0	3.7	88.8
Touro C	0.2	30.9	2.8	9.2	55.2
Trocaire C	0.5	4.7	0.1	0.8	93.9
Union C	0.0	2.0	0.8	0.9	94.6
United Talmudical Acad	0.0	0.0	0.0	0.0	100.0
U of Rochester	0.0	3.3	2.6	0.8	91.9
Utica Sch of Commerce	0.0	3.4	0.0	0.4	96.2
Vassar C	0.1	6.0	2.4	1.1	87.9
Villa Maria C	0.0	20.2	0.1	1.1	78.4
Wadhams Hall Seminary-C	0.0	1.6	0.0	0.0	98.4
Wagner C	0.0	5.3	0.2	1.7	89.2
Webb Inst of Naval Architecture	0.0	0.0	2.8	0.0	97.2
Wells C	0.2	2.8	1.5	1.7	93.0
Westchester Business Sch	0.0	46.4	0.2	6.0	46.4
Wood Sch	0.0	4.3	3.0	16.5	75.5
Yeshiva Beth Hillel Krasna	0.0	0.0	[illegible]	0.0	100.0
Yeshiva Bnei Torah	0.0	0.0	0.0	0.0	100.0
Yeshiva Chofetz Chaim Radun	0.0	0.0	0.0	0.0	100.0
Yeshiva Karlin Stolin Inst	0.0	0.0	0.0	0.0	100.0
Yeshiva of Nitra Rabbinical C	0.0	0.0	0.0	0.0	100.0
Yeshiva U	0.0	0.0	0.3	0.0	92.6
Yeshivat Mikdash Melech	0.0	0.0	0.0	0.0	100.0
NORTH CAROLINA					
Anson Tech Inst	0.0	32.1	0.3	0.0	67.5
Asheboro C	0.0	39.5	0.8	0.0	58.9
Asheville Buncombe Tech C	0.3	7.3	0.0	0.4	91.8
Atlantic Christian C	0.3	12.2	0.1	0.3	86.0
Barber-Scotia C	0.0	97.8	0.0	0.0	0.0
Beaufort County CC	0.0	28.0	0.1	0.0	71.9
Belmont Abbey C	0.1	6.8	0.4	1.3	90.3
Bennett C	0.0	98.8	0.0	0.2	0.0
Bladen Tech Inst	0.5	44.8	0.0	0.0	54.7
Blantons JC	0.0	27.9	0.0	0.0	70.7
Blue Ridge Tech C	0.3	3.5	0.2	0.4	95.4
Brevard C	0.0	4.7	0.0	1.0	90.0
Caldwell CC & Tech Inst	0.2	7.4	0.4	0.1	91.2
Campbell U	0.9	7.2	1.4	0.3	87.2
Cape Fear Tech Inst	0.6	19.7	0.6	0.3	78.5
Carteret Tech Inst	0.3	7.6	0.6	0.4	90.8
Catawba C	0.1	10.7	0.2	0.4	88.2
Catawba Valley Tech C	0.1	8.4	0.5	0.2	90.7
Cecil's JC	0.0	18.3	0.0	0.0	81.7
Central Carolina Tech C	0.3	20.7	0.1	0.5	78.3
Central Piedmont CC	0.2	24.2	0.7	0.3	73.3
Chowan C	1.0	24.0	0.4	0.8	69.6
Cleveland Tech C	0.1	27.5	0.3	0.1	71.7
Coastal Carolina CC	0.8	18.2	0.8	1.9	77.4

	American Indian	Black	Asian	Hispanic	White
NORTH CAROLINA—Continued					
C of the Albemarle	0.1	24.1	0.1	0.0	75.7
Craven CC	0.2	22.3	0.3	1.1	76.1
Davidson C	0.1	3.5	0.6	0.1	95.7
Davidson County CC	0.2	9.5	0.4	0.1	89.7
Duke U	0.1	5.1	1.6	0.8	90.5
Durham Tech Inst	0.6	47.3	1.7	0.4	49.8
Edgecombe Tech C	0.1	57.2	0.0	0.0	42.7
Elon C	0.3	8.7	0.2	0.0	90.6
Fayetteville Tech Inst	1.2	24.0	1.3	2.0	67.0
Forsyth Tech Inst	0.2	17.4	0.3	0.3	81.8
Gardner-Webb C	0.0	11.2	0.3	0.3	87.5
Gaston C	0.1	10.5	0.2	0.0	88.4
Greensboro C	0.8	22.0	0.3	0.9	75.6
Guilford C	0.1	6.0	0.3	0.9	90.7
Guilford Tech Inst	0.3	23.0	1.0	0.3	74.7
Halifax CC	0.7	45.9	0.1	0.5	52.8
Hamilton C	0.0	60.3	0.0	0.2	39.4
Hardbarger JC of Business	0.0	25.0	0.0	0.4	74.1
Haywood Tech Inst	0.5	1.5	0.3	0.3	97.2
High Point C	0.0	8.2	0.0	1.0	89.9
Isothermal CC	0.0	12.9	0.4	0.0	86.6
James Sprunt Tech C	0.4	36.6	0.1	0.3	62.6
Jefferson C	0.0	80.4	0.0	0.7	18.8
Johnson C Smith U	0.0	98.0	0.0	0.1	0.1
Johnston Tech C	0.6	23.6	0.1	0.0	75.6
John Wesley C	0.0	5.3	0.0	0.0	93.4
King's C-Raleigh	0.0	51.6	0.0	0.0	48.4
Lafayette C	0.7	67.5	0.7	1.9	29.1
Lees-McRae C	0.1	4.1	0.0	0.1	95.4
Lenoir CC	0.1	32.1	0.3	0.3	67.2
Lenoir-Rhyne C	0.1	4.7	0.2	0.3	94.1
Livingstone C	0.0	95.6	0.0	0.0	2.8
Louisburg C	0.5	11.4	1.1	0.4	85.8
Mars Hill C	0.6	4.3	0.0	0.2	94.7
Martin CC	0.0	46.0	0.0	0.0	54.0
Mayland Tech C	0.5	6.3	0.2	0.7	92.4
McDowell Tech Inst	0.4	5.3	0.4	0.2	93.4
Meredith C	0.1	0.9	0.6	0.3	97.9
Methodist C	0.8	17.7	6.0	2.8	72.6
Mitchell CC	0.2	18.9	0.2	0.1	80.7
Montgomery Tech Inst	0.9	32.9	0.0	0.2	65.9
Montreat-Anderson C	0.0	4.4	0.7	0.5	94.1
Mt Olive C	0.0	14.1	0.0	0.2	85.4
Nash Tech Inst	1.9	28.2	0.9	0.1	68.8
N C Wesleyan C	0.2	25.6	0.1	0.2	73.3
Pamlico Tech Inst	0.0	37.4	0.0	0.0	62.6
Peace C	0.0	0.4	0.0	0.0	99.6
Pfeiffer C	0.0	9.1	0.4	0.9	88.1
Piedmont Aerospace Inst	0.0	4.6	0.0	0.0	77.1
Piedmont Bible C	0.0	0.4	0.0	0.0	97.4
Piedmont Tech C	0.3	47.9	0.5	0.0	51.3
Pitt CC	0.1	29.2	0.3	0.4	70.1
Queens C	0.0	4.8	0.1	0.9	93.4
Randolph Tech C	0.3	5.5	0.3	0.2	93.6
Richmond Tech C	3.1	39.2	0.2	0.2	57.1
Roanoke Bible C	0.0	0.6	0.0	0.0	99.4
Roanoke-Chowan Tech Inst	0.4	55.2	0.0	0.0	44.4
Robeson Tech C	36.5	27.0	0.1	0.5	35.9
Rockingham CC	0.0	18.9	0.2	0.0	80.8
Rowan Tech C	0.5	13.2	0.1	0.1	85.8
Rutledge C of Durham	0.0	70.1	0.0	0.0	29.9
Sacred Heart C	0.0	11.6	2.7	1.7	78.7
St Andrew's Presbyterian C	0.9	9.5	0.4	1.0	86.6
St Augustine's C	0.0	96.6	0.1	0.0	0.0
St Mary's C	0.3	0.0	2.7	0.7	96.3
Salem C	0.0	1.3	0.2	0.2	97.0
Sampson Tech C	3.0	32.4	0.0	0.0	64.6
Sandhills CC	1.6	15.5	0.3	0.6	81.4
Shaw U	0.1	85.5	0.0	0.0	1.1
Southeastern CC	4.5	26.5	0.0	0.0	68.8
Southwestern Tech C	16.5	1.4	0.2	0.0	82.0
Stanly Tech Inst	0.3	12.8	0.0	0.2	86.5
Surry CC	0.3	5.5	0.2	0.1	93.8
Tech C of Alamance	0.1	17.8	0.0	0.1	82.0
Tri-County Tech Inst	2.3	1.1	0.3	0.0	96.3
U of North Carolina System					
Appalachian St U	0.2	2.3	0.1	0.3	96.9
East Carolina U	0.4	10.0	0.4	0.2	88.7
Elizabeth City St U	0.2	87.6	0.2	0.0	11.0
Fayetteville St U	0.2	86.3	0.7	0.6	11.9
N C A&T St U	0.1	89.5	0.0	0.1	6.7
N C Central U	0.2	94.5	0.1	0.2	4.1
N C Sch of the Arts	0.2	10.6	0.5	1.6	86.2
N C St U at Raleigh	0.3	6.5	1.0	0.5	90.0
Pembroke St U	23.7	12.4	0.3	0.4	62.6
U of North Carolina					
Asheville	0.1	5.3	1.4	0.3	92.9
Chapel Hill	0.6	8.4	0.5	0.6	89.7
Charlotte	0.1	7.6	0.6	0.6	88.7
Greensboro	0.1	11.4	0.4	0.3	87.0
Wilmington	0.1	5.2	0.5	0.4	93.5
Western Carolina U	1.4	5.1	0.4	0.3	92.3
Winston-Salem St U	0.0	88.3	0.2	0.0	11.3
Vance-Granville CC	0.0	52.1	0.0	0.0	47.9
Wake Forest U	0.2	4.0	0.5	0.5	94.2
Wake Tech C	0.3	15.1	0.4	0.2	83.4
Warren Wilson C	0.2	2.1	1.6	0.4	87.5
Wayne CC	0.1	26.2	0.5	0.5	72.5
Western Piedmont CC	0.2	8.2	0.1	0.5	91.0
Wilkes CC	0.2	5.7	0.3	0.1	92.9
Wilson County Tech Inst	0.0	37.9	0.5	0.1	61.5
Wingate C	0.2	5.7	0.1	0.3	92.5
Winsalm C	0.0	59.2	0.5	0.3	40.1
NORTH DAKOTA					
Bismarck JC	0.5	5.7	0.2	0.0	98.9
Dickinson St C	2.1	0.4	0.2	0.1	95.7
Jamestown C	0.2	3.4	0.8	0.2	90.2
Lake Region JC	12.9	0.3	0.0	0.0	86.8
Mary C	7.9	0.3	0.2	0.0	90.3
Mayville St C	3.1	1.6	0.0	0.2	93.9
Minot St C	1.4	0.8	0.1	0.7	95.9
North Dakota St Sch of Science	2.1	0.3	0.1	0.1	96.4
North Dakota St U					
Main Campus	0.4	0.3	0.4	0.1	97.4
Bottineau Branch	4.5	0.6	0.0	0.0	91.1
Northwest Bible C	0.0	0.0	0.0	0.0	93.2
Standing Rock CC	77.3	0.0	0.0	0.0	22.7
Trinity Bible Inst	0.8	0.6	1.1	0.3	97.0
U of North Dakota					
Main Campus	1.6	0.6	0.5	0.2	96.3
Williston Branch	3.1	0.2	0.0	0.3	96.3
Valley City St C	0.9	1.1	0.0	0.2	97.3
OHIO					
ATES Tech Sch	0.0	13.9	0.0	0.6	85.5
Antioch U	3.4	29.4	0.8	1.7	63.0
Art Acad of Cincinnati	0.0	5.3	0.0	0.4	93.9
Ashland C	0.0	9.2	0.0	0.3	88.5
Baldwin-Wallace C	0.1	8.0	0.6	1.4	89.6
Belmont Tech C	0.0	0.5	0.0	0.0	99.4

	American Indian	Black	Asian	Hispanic	White
OHIO—Continued					
Bluffton C	0.0	5.8	0.3	0.5	90.7
Borromeo C	0.0	0.0	0.0	0.0	98.7
Bowling Green St U					
Main Campus	0.0	4.6	0.3	0.6	93.8
Firelands	0.0	3.0	0.0	0.3	96.7
Capital U	0.1	12.3	0.7	0.3	85.6
Case Western Reserve U	0.3	5.3	4.3	1.4	84.5
Cedarville C	0.0	1.0	0.2	0.4	97.4
Central Ohio Tech C	0.2	1.3	0.3	0.2	98.0
Central St U	0.0	89.6	0.1	0.1	5.6
Chatfield C	0.0	8.5	0.0	0.0	89.4
Cincinnati Bible Seminary	0.2	0.7	0.0	0.0	98.8
Cincinnati Tech C	0.3	15.4	0.4	0.2	83.0
Circleville Bible C	0.4	0.4	0.0	0.4	98.4
Clark Tech C	0.2	9.2	0.3	0.1	88.9
Cleveland C of Jewish Studies	0.0	0.0	0.0	0.0	95.2
Cleveland Inst of Art	0.0	6.3	0.2	1.3	91.7
Cleveland Inst of Music	0.0	2.4	0.0	0.0	88.4
Cleveland St U	0.1	21.2	0.3	0.7	76.3
C of Mt St Joseph-on-the-Ohio	0.0	4.4	0.5	0.8	94.1
C of Steubenville	0.4	3.5	1.0	0.6	92.9
C of Wooster	1.2	4.7	0.6	0.1	93.5
Columbus C of Art and Design	0.1	6.6	1.0	0.7	90.8
Columbus Tech Inst	0.8	20.4	0.5	0.2	76.7
Cuyahoga CC District	0.5	24.3	1.0	1.4	71.9
Davis JC	0.2	20.4	0.6	2.7	76.1
Defiance C	0.0	5.2	0.1	2.0	90.6
Denison U	0.0	4.3	0.5	0.1	94.0
Dyke C	0.0	54.0	0.4	0.6	44.5
Edison St CC	0.2	0.9	0.3	0.1	98.6
Electronic Tech Inst	0.0	13.3	1.0	2.7	83.0
Findlay C	0.0	7.1	0.0	1.4	86.1
Franklin U	0.3	13.9	0.4	0.4	84.5
Heidelberg C	0.0	4.7	0.4	0.1	93.6
Hiram C	0.4	4.3	0.2	0.6	94.1
Hocking Tech C	0.0	0.5	0.0	0.0	98.3
ITT Tech Inst	0.0	34.9	0.0	0.0	59.9
Jefferson Tech C	0.1	2.5	0.5	0.5	96.3
John Carroll U	0.0	4.1	0.0	1.3	94.0
Kent St U					
Main Campus	0.1	7.4	0.4	0.4	90.1
Ashtabula	0.6	1.2	0.1	0.1	97.9
East Liverpool	0.2	3.3	0.2	0.0	96.3
Salem	0.2	1.8	0.0	0.0	97.8
Stark County	0.1	5.0	0.0	0.4	94.4
Trumbull	0.2	5.9	0.1	0.1	93.7
Tuscarawas	0.0	0.2	0.0	0.1	99.6
Kenyon C	0.0	0.6	0.5	0.4	97.3
Kettering C of Medical Arts	0.3	2.3	0.8	0.0	96.7
Lake Erie C	0.1	2.1	0.1	0.2	96.1
Lakeland CC	0.1	1.6	0.6	0.1	97.6
Lima Tech C	0.3	4.9	0.4	0.6	93.7
Lorain County CC	0.2	6.7	0.4	3.7	88.3
Lourdes C	0.0	0.7	0.0	0.2	98.6
Malone C	0.1	6.2	0.4	0.4	91.3
Marietta C	0.0	0.4	0.2	0.1	98.5
Marion Tech C	0.4	7.0	0.5	0.4	90.6
Miami-Jacobs JC of Business	0.0	18.4	0.0	2.2	79.2
Miami U					
Hamilton	0.1	4.4	0.2	0.3	95.0
Middletown	0.2	2.4	0.1	0.1	97.2
Oxford	0.1	2.0	0.3	0.3	97.4
Michael J Owens Tech C	0.2	7.3	0.4	1.8	88.3
Mt Union C	0.0	3.4	0.0	0.5	94.9
Mt Vernon Nazarene C	0.1	1.0	0.1	0.6	97.8
Muskingum Area Tech C	0.2	2.9	0.1	0.1	96.6
Muskingum C	0.0	1.2	0.0	0.0	96.6
North Central Tech C	0.1	3.6	0.3	0.2	95.8
Northwest Tech C	0.0	0.1	0.0	3.4	96.4
Northwestern Business C Tech Center	0.0	8.1	0.0	0.2	91.7
Notre Dame C	0.0	13.3	0.4	0.2	84.3
Oberlin C	0.1	8.4	2.4	1.3	86.3
Ohio Dominican C	0.0	18.4	0.4	1.2	74.3
Ohio Inst of Tech	0.1	13.6	0.9	0.7	84.7
Ohio Northern U	0.1	1.8	0.5	0.2	94.4
Ohio St U					
Main Campus	0.1	5.1	0.9	0.5	92.2
Agricultural Tech Inst	0.1	0.7	0.0	0.3	99.0
Lima Branch	0.0	3.5	0.1	0.4	96.0
Mansfield Branch	0.1	1.9	0.5	0.5	97.1
Marion Branch	0.0	3.8	0.4	0.1	95.7
Newark Branch	0.0	0.8	0.6	0.4	98.3
Ohio U					
Main Campus	0.3	6.2	0.2	0.3	87.0
Belmont County Branch	0.2	0.2	0.0	0.0	99.6
Chillicothe	0.4	3.4	0.0	0.1	95.9
Ironton	0.0	1.3	0.3	0.3	98.2
Lancaster	0.2	0.2	0.4	0.1	98.9
Zanesville	0.9	3.0	0.1	0.4	95.0
Ohio Wesleyan U	0.0	4.5	0.8	0.5	91.1
Otterbein C	0.2	3.0	0.4	0.3	94.7
Pontifical C of Josephinum	0.0	0.0	2.7	4.5	92.8
Rabbinical C of Telshe	0.0	0.0	0.0	0.0	100.0
Rio Grande C	0.2	1.3	0.2	0.2	95.3
Shawnee St CC	0.5	5.5	0.3	0.2	93.3
Sinclair CC	0.4	16.4	0.8	0.6	81.7
Southern Ohio C	0.0	26.5	0.4	0.2	72.7
Southern St General & Tech C	0.8	1.6	0.1	0.1	97.4
Stark Tech C	0.4	5.0	0.4	0.3	93.5
Terra Tech C	0.0	1.5	0.0	2.4	95.5
Tiffin U	0.0	2.9	0.0	1.9	93.1
Union for Experimenting C's and U's	0.5	44.4	0.5	14.8	39.8
U of Akron					
Main Campus	0.4	7.8	0.5	0.3	90.1
Wayne General & Tech C	0.8	0.6	0.0	0.0	98.6
U of Cincinnati					
Main Campus	0.1	12.4	0.6	0.5	86.0
Clermont General & Tech C	0.4	0.9	0.0	0.2	98.5
Raymond Walters C	0.3	8.6	0.4	0.5	90.1
U of Dayton	0.1	5.4	0.9	1.6	89.8
U of Toledo	1.1	9.3	0.6	1.0	84.7
Urbana C	0.1	20.6	0.0	0.5	76.9
Ursuline C	0.1	10.9	1.2	0.6	86.7
Walsh C	0.0	5.2	0.0	0.9	82.2
Washington Tech C	1.3	0.9	0.0	0.2	97.6
West Side Inst Tech	0.0	40.8	0.0	7.9	51.3
Wilberforce U	0.0	97.8	0.0	0.0	0.3
Wilmington C	0.0	15.9	0.0	0.1	80.9
Wittenberg U	0.0	5.1	0.4	0.1	93.3
Wright St U					
Main Campus	0.1	6.9	1.1	0.7	90.2
Western Ohio	0.0	0.0	0.4	0.2	99.3
Xavier U	0.0	6.1	0.4	2.0	89.1
Youngstown C of Business-Drafting	0.0	25.0	0.0	1.8	72.9
Youngstown St U	0.1	7.8	0.2	0.6	89.2

	American Indian	Black	Asian	Hispanic	White
OKLAHOMA					
Bacone C	47.5	11.8	2.2	0.2	38.2
Bartlesville Wesleyan C	3.0	2.7	0.2	0.5	92.1
Bethany Nazarene C	0.9	0.7	0.7	1.0	94.2
Cameron U	3.2	13.5	1.5	3.3	77.9
Carl Albert JC	10.5	5.0	0.5	0.3	79.2
Central St U	1.7	11.3	1.4	0.8	80.2
Claremore JC	8.4	4.2	1.3	0.5	65.3
Connors St C	6.9	11.3	0.8	0.3	80.7
E Central Okla St U	7.2	4.5	0.3	0.5	87.1
Eastern Oklahoma St C	6.1	5.2	0.2	0.9	86.6
El Reno JC	2.6	4.0	0.1	1.1	88.8
Flaming Rainbow U	77.3	0.3	0.0	0.0	22.4
Hillsdale Free Will Baptist C	0.0	1.4	0.0	0.0	95.7
Langston U	0.6	68.0	0.1	0.4	11.6
Midwest Christian C	0.0	4.0	0.0	0.0	94.9
Murray St C	11.8	6.7	0.2	0.7	79.4
NE Oklahoma A&M C	5.3	5.8	0.1	0.2	83.8
NE Oklahoma St U	17.6	6.0	0.4	0.7	74.5
Northern Oklahoma C	7.8	2.8	0.2	0.5	84.8
NW Oklahoma St U	1.0	3.0	0.1	0.9	89.6
Oklahoma Baptist U	2.3	1.7	0.3	0.3	93.2
Oklahoma Christian C	1.0	7.2	0.9	0.3	89.7
Oklahoma City SW C	1.2	3.9	3.6	1.2	54.1
Oklahoma City U	2.0	7.8	0.0	1.3	80.7
Okla Panhandle St U	0.8	6.5	0.7	2.9	87.0
Okla Sch of Business, Accountancy, Law, & Finance	0.0	8.9	0.0	0.0	84.9
Oklahoma State U					
Main Campus	1.8	3.6	1.3	0.9	89.1
Tech Inst	1.7	5.8	3.1	0.7	87.6
Oral Roberts U	0.6	4.2	0.8	1.2	86.4
Oscar Rose JC	2.9	14.0	1.8	1.8	73.6
Phillips U	0.6	4.0	0.1	0.8	94.5
St Gregory's C	3.3	3.3	0.6	4.5	76.1
Sayre JC	1.3	0.8	0.0	2.6	95.3
Seminole JC	7.1	5.6	0.7	0.5	80.5
Southeastern Okla St U	8.5	4.5	2.0	0.6	74.1
South Oklahoma City JC	3.2	4.4	2.4	1.3	85.9
Southwestern Okla St U	2.6	3.1	0.8	0.8	90.6
Spartan Sch of Aeronautics	0.7	5.4	2.7	4.2	69.5
Tulsa JC	2.4	7.3	0.5	0.9	87.5
U of Oklahoma					
Health Science Center	2.8	3.8	1.5	1.3	87.1
Norman Campus	2.9	3.9	0.7	0.8	84.8
U of Science & Arts	11.2	6.5	0.3	0.4	74.1
U of Tulsa	1.5	3.1	0.2	0.4	86.5
Western Oklahoma St C	1.4	7.3	0.4	4.2	86.3
OREGON					
Bassist C	0.6	2.4	1.8	1.2	92.1
Blue Mountain CC	4.2	0.3	0.3	0.7	94.5
Central Oregon CC	3.6	0.5	0.4	1.0	94.1
Chemeketa CC	1.5	0.9	3.0	2.2	92.1
Clackamas CC	0.1	0.3	0.2	0.3	98.2
Clatsop CC	0.5	0.5	2.4	0.9	93.9
Collegio Cesar Chavez	0.0	0.0	0.0	61.9	38.1
Columbia Christian C	0.7	3.4	0.0	0.7	94.9
Concordia C	0.6	3.8	2.2	0.3	89.6
George Fox C	1.1	2.0	0.7	1.0	94.3
Judson Baptist C	1.1	0.4	0.8	0.8	97.0
Lane CC	1.5	1.0	1.4	1.3	93.5
Lewis & Clark C	0.6	0.7	3.0	1.1	86.4
Linfield C	0.6	2.1	4.4	0.8	89.8
Linn-Benton CC	0.8	0.2	0.7	0.5	95.9
Marylhurst C of Learning	0.4	1.6	1.2	1.6	94.4
Mt Angel Seminary	0.0	0.0	0.0	3.7	79.6
Mt Hood CC	1.2	1.4	2.0	0.8	94.0
Multnomah Sch of the Bible	0.5	0.5	0.9	0.9	94.9
Museum Art School	1.1	1.7	5.5	0.6	89.0
Northwest Christian C	0.4	0.8	1.7	0.8	94.1
Oregon Polytech Inst	0.0	0.0	4.9	0.0	95.1
Oregon St U System					
Eastern Oregon St C	2.2	2.4	3.1	1.6	86.9
Oregon C of Ed	0.6	0.6	1.3	0.7	91.6
Oregon Inst of Tech	1.2	0.7	2.2	0.5	94.2
Oregon St U	1.7	0.7	3.7	0.8	90.9
Portland St U	0.8	2.6	4.6	1.3	81.9
Southern Oregon St C	1.2	0.7	0.9	1.0	92.8
U of Oregon	0.8	1.2	3.2	1.2	89.9
Ore Health Sciences U	0.7	0.2	2.3	0.5	96.3
Pacific U	1.9	4.0	15.3	2.9	73.6
Portland CC	0.2	0.9	1.8	0.4	96.2
Reed C	0.0	0.0	4.0	0.7	92.0
Rogue CC	1.0	0.2	0.3	0.7	97.7
SW Oregon CC	6.2	0.9	2.8	3.3	86.2
Treasure Valley CC	0.7	0.6	1.9	4.2	92.3
Umpqua CC	0.5	0.0	0.2	0.2	98.9
U of Portland	0.8	2.2	3.5	1.3	74.4
Warner Pacific C	0.3	1.0	2.1	2.1	73.8
Western Baptist C	0.5	0.0	0.5	0.2	98.0
Willamette U	0.7	1.3	4.2	1.6	89.5
PENNSYLVANIA					
Acad of the New Church	0.0	1.4	0.0	0.0	87.8
Albright C	0.1	1.1	1.0	0.4	96.7
Allegheny C	0.1	3.7	0.4	0.8	93.9
Allentown C of St Francis de Sales	0.4	1.5	0.4	1.3	95.6
Alliance C	0.0	4.2	0.0	0.4	95.4
Alvernia C	0.0	1.4	0.7	0.7	97.0
Antonelli Sch of Photography	0.0	25.2	0.7	0.7	73.5
Art Inst of Philadelphia	0.3	16.5	0.6	1.1	81.5
Art Inst of Pittsburgh	0.1	8.5	0.3	0.5	90.6
Baptist Bible C of Pennsylvania	0.0	0.6	0.4	0.4	98.3
Beaver C	0.0	16.4	1.9	0.7	79.1
Berean Inst	0.0	96.7	0.7	2.6	0.0
Bloomsburg St C	0.1	2.5	0.2	0.3	96.6
Bryn Mawr C	0.1	3.5	5.1	3.3	82.1
Bucknell U	0.0	2.3	0.9	0.6	94.6
Bucks County CC	0.3	1.1	0.5	0.4	97.7
Butler County CC	0.0	0.3	0.2	0.0	99.4
Cabrini C	0.0	9.4	0.6	0.2	89.4
California St C	0.2	7.4	0.4	0.7	91.0
Carlow C	0.1	11.0	0.7	0.4	87.8
Carnegie-Mellon U	0.2	4.8	1.6	0.2	92.4
Cedar Crest C	0.0	2.1	0.9	1.5	95.4
Central Pennsylvania Business Sch	0.0	3.5	0.5	0.7	95.2
Chatham C	0.0	17.6	1.5	0.0	79.7
Chestnut Hill C	0.0	7.0	0.9	6.4	84.5
Cheyney St C	1.1	89.5	0.3	0.3	5.0
Clarion St C					
Main Campus	0.1	3.7	0.0	0.2	94.3
Venango	0.0	0.8	0.0	0.0	99.2
C of Misericordia	0.2	1.3	0.1	1.7	95.4
Combs C of Music	0.0	49.4	0.0	0.0	44.2
CC of Allegheny County					
Allegheny	0.3	21.0	0.6	0.3	76.8
Boyce	0.2	5.8	1.0	0.3	92.6

	American Indian	Black	Asian	Hispanic	White
PENNSYLVANIA—Continued					
CC of Allegheny County—Continued					
North	0.1	3.2	0.2	0.3	96.2
South	0.1	3.0	0.2	0.3	96.3
CC of Beaver County	0.0	4.0	0.0	0.0	96.0
CC of Delaware County	0.1	4.7	0.4	0.3	94.4
CC of Philadelphia	0.5	59.8	2.9	4.0	32.8
Curtis Inst of Music	0.0	1.9	1.3	0.0	77.5
Delaware Valley					
C of Science & Ag	0.0	2.0	0.0	0.0	98.0
Dickinson C	0.1	1.3	0.3	1.1	96.6
Drexel U	0.1	8.2	3.0	0.8	85.9
Duquesne U	0.0	4.4	0.0	0.5	95.1
Eastern C	0.2	15.1	0.8	2.2	80.0
E Stroudsburg St C	0.0	3.8	0.3	0.8	94.8
Edinboro St C	0.3	4.4	0.4	0.2	93.4
Electronic Institutes					
Harrisburg	0.0	0.9	3.6	0.0	95.5
Pittsburgh	0.0	6.5	0.0	0.0	93.5
Elizabethtown C	0.0	1.0	0.0	0.2	97.9
Franklin & Marshall C	0.0	3.2	0.8	0.9	93.6
Gannon U	1.0	2.7	0.4	0.3	94.3
Geneva C	0.2	8.5	0.7	0.3	90.5
Gettysburg C	0.1	0.7	0.3	0.3	98.5
Gratz C	0.0	0.0	0.0	0.0	93.8
Grove City C	0.0	0.4	0.0	0.1	99.2
Gwynedd-Mercy C	0.1	3.3	1.3	0.5	94.8
Hahnemann Medical C					
& Hospital	0.3	14.4	1.9	1.4	82.1
Harcum JC	0.1	12.4	0.5	0.7	85.3
Harrisburg Area CC	0.1	5.6	2.0	0.5	91.8
Haverford C	0.0	3.7	1.5	3.0	90.3
Holy Family C	0.2	1.4	0.9	1.0	96.4
Immaculata C	0.0	5.2	0.1	2.1	90.0
Indiana U of Pa	0.1	5.3	0.2	0.4	93.2
Juniata C	0.1	0.4	0.6	0.9	97.5
Keystone JC	0.0	3.2	0.0	0.5	95.0
King's C	0.0	0.4	0.5	0.6	98.2
Kutztown St C	0.1	3.3	0.1	0.7	95.0
Lackawanna JC	0.1	0.8	0.2	0.1	98.6
Lafayette C	0.0	3.0	0.3	0.7	94.7
Lancaster Bible C	0.0	0.3	0.0	0.0	99.4
La Roche C	0.0	3.7	0.1	0.6	94.4
La Salle C	0.0	7.0	0.5	0.3	92.1
Lebanon Valley C	0.0	1.4	0.7	0.0	96.9
Lehigh County CC	0.3	1.6	1.0	1.7	94.9
Lehigh U	0.0	2.1	0.1	0.7	94.8
Lincoln Tech Inst	0.0	2.7	0.5	0.0	96.7
Lincoln U	0.0	91.6	0.2	0.2	0.8
Lock Haven St C	0.1	4.3	0.2	0.5	93.6
Luzerne County CC	0.0	0.4	0.0	0.0	99.5
Lycoming C	0.0	0.6	0.3	0.6	98.6
Lyons Tech Inst	0.0	43.1	0.0	19.4	37.5
Manor JC	0.0	5.3	0.0	0.0	94.1
Mansfield St C	0.0	3.5	0.0	0.3	95.5
Marywood C	0.1	0.5	0.4	0.3	97.7
McCarrie Schs	3.4	22.9	4.2	5.9	63.6
Mercyhurst C	0.0	5.9	0.1	0.1	93.8
Messiah C	0.0	1.9	0.5	0.9	94.8
Millersville St C	0.1	5.5	1.5	1.1	90.9
Montgomery County CC	0.1	2.4	1.3	0.2	95.6
Moore C of Art	0.0	8.1	0.5	1.3	89.4
Moravian C	0.0	1.2	0.8	0.8	97.2
Mt Aloysius JC	0.0	2.1	0.2	0.0	97.1
Muhlenberg C	0.2	0.3	1.2	0.8	97.4
Neumann C	0.0	2.3	0.1	0.0	97.5
New Sch of Music	0.0	4.9	2.5	0.0	82.7
Northampton County					
Area CC	0.0	1.4	0.7	1.5	96.1
NE Christian JC	0.0	22.9	0.0	3.6	62.7
O S Johnson Sch of Tech	0.0	0.0	0.4	0.0	98.6
Peirce JC	0.2	43.9	0.7	1.4	53.1
Pennsylvania Tech Inst	0.0	3.4	0.0	0.0	96.6
Pennco Tech	0.0	19.9	1.1	1.7	77.4
Pennsylvania Inst of Tech	0.0	33.9	0.0	2.8	63.3
Pennsylvania St U					
Main Campus	0.1	2.4	0.8	0.5	96.0
Allentown	0.0	0.0	0.9	0.0	99.1
Altoona	0.3	1.7	0.4	0.3	97.3
Beaver	0.0	5.2	0.1	0.1	94.2
Behrend	0.0	3.3	0.3	0.4	95.7
Berks	0.0	0.7	1.0	0.5	97.7
Capitol	0.1	3.5	1.8	0.7	93.6
Delaware	0.1	4.6	1.0	0.5	93.7
Dubois	0.0	0.0	0.0	0.2	99.8
Fayette	0.2	1.2	1.0	0.0	97.6
Hazleton	0.1	0.0	0.7	1.0	97.9
Hershey Medical Center	0.0	1.3	1.3	0.0	97.5
McKeesport	0.0	3.5	0.9	0.4	95.1
Mont Alto	0.3	0.7	1.4	0.4	97.3
New Kensington	0.1	0.7	0.3	0.1	98.8
Ogontz	0.0	5.2	1.6	0.6	92.4
Schuylkill	0.0	2.7	0.8	0.2	96.2
Shenango Valley	0.2	1.8	0.5	0.0	97.5
Wilkes-Barre	0.0	1.0	0.0	0.4	98.2
Worthington-Scranton	0.1	0.4	0.0	0.3	99.2
York	0.1	0.4	1.8	0.7	96.7
Philadelphia C of Art	0.0	8.8	0.6	1.2	86.3
Philadelphia C of Bible	1.0	[illegible]	0.4	1.2	85.1
Philadelphia C of					
Performing Arts	0.0	16.0	1.5	1.8	76.9
Philadelphia C of					
Pharmacy & Science	0.1	1.8	1.2	0.6	96.1
Philadelphia C of					
Textiles & Science	0.0	11.6	0.5	0.7	80.2
Pinebrook JC	0.0	14.6	4.4	0.0	78.8
Pittsburgh Inst Aeronautics	0.0	2.3	0.0	1.5	96.2
Pittsburgh Tech Inst	0.0	6.3	0.0	0.0	93.8
Point Park C	0.0	10.5	1.3	0.3	78.1
Reading Area CC	1.1	4.2	1.4	2.8	90.5
Robert Morris C	0.1	6.2	0.1	0.1	93.2
Rosemont C	0.0	0.4	1.5	1.7	96.1
St Charles					
Borromeo Seminary	0.0	1.4	0.0	0.0	98.6
St Francis C	0.0	0.8	0.4	0.9	97.8
St Joseph's U	0.2	6.1	0.6	1.1	88.9
St Vincent C	0.0	2.8	0.1	0.2	94.1
Seton Hill C	0.0	5.3	0.7	2.1	91.9
Shippensburg St C	0.1	4.0	0.3	3.8	91.6
Slippery Rock St C	0.1	4.1	0.2	0.2	94.5
Spring Garden C	0.0	5.8	0.8	0.4	89.0
Susquehanna U	0.0	1.0	0.0	0.7	97.8
Swarthmore C	0.1	4.9	2.3	1.4	87.8
Talmud Yeshiva					
of Philadelphia	0.0	0.0	0.0	0.0	94.4
Temple U	0.4	18.9	1.6	1.8	77.2
Thiel C	0.1	2.6	0.1	0.0	96.6
Thomas Jefferson U	0.4	5.4	1.5	0.4	92.1
Tracey-Warner School	0.0	77.0	0.9	0.0	22.1
Triangle Inst of Tech					
Erie	0.0	1.4	0.0	0.0	98.6
United Wesleyan C	0.0	1.0	0.5	0.0	91.2
U of Pennsylvania	0.2	5.4	3.8	2.0	85.5
U of Pittsburgh					
Main Campus	0.2	11.8	1.1	0.4	84.6
Bradford	0.0	1.7	0.1	0.0	98.2
Greensburg	0.0	0.7	0.1	0.0	99.2
Johnstown	0.0	1.8	0.2	0.2	97.7
Titusville	0.0	2.8	0.0	0.0	96.8

	American Indian	Black	Asian	Hispanic	White
PENNSYLVANIA—Continued					
U of Scranton	0.0	0.3	0.1	0.1	99.3
Ursinus C	0.0	1.0	0.6	0.4	96.3
Valley Tech Inst	1.1	1.7	0.0	0.0	97.2
Valley Forge Christian C	0.2	2.0	2.4	0.8	93.2
Valley Forge Military JC	0.0	10.6	0.0	0.0	89.4
Villa Maria C	0.0	3.3	0.6	0.0	96.0
Villanova U	0.0	1.8	0.4	0.2	96.9
Washington Jefferson C	0.0	1.1	0.3	0.2	97.8
Waynesburg C	0.0	7.8	0.0	0.0	91.1
West Chester St C	0.2	8.4	0.5	0.8	89.7
Westminster C	0.0	1.7	0.3	0.3	97.7
Westmoreland County CC	0.1	1.0	0.4	0.1	98.5
Wheeler School	0.0	49.6	0.2	0.0	49.8
Widener C of Widener U	0.3	7.6	0.1	0.4	90.8
Wilkes C	0.0	0.6	0.4	0.1	98.5
Williamsport Area CC	0.0	1.7	0.3	0.2	97.8
Wilson C	0.0	9.4	0.6	0.6	78.2
Yeshivath Beth Moshe	0.0	0.0	0.0	0.0	100.0
York C of Pennsylvania	0.0	1.8	0.0	0.2	97.9
RHODE ISLAND					
Barrington C	0.0	5.3	0.2	1.0	91.5
Brown U	0.2	6.2	3.8	1.4	86.1
Bryant C of Business					
Administration	0.0	0.4	0.3	0.2	98.7
CC of Rhode Island	0.3	4.1	0.4	1.3	93.9
Johnson & Wales C	0.1	13.5	1.4	6.7	77.0
New England Inst Tech	0.1	4.0	0.4	2.3	91.9
Providence C	0.1	0.7	0.0	0.2	99.1
Rhode Island C	0.5	2.5	0.5	1.2	96.0
R I Sch of Design	0.3	1.5	2.2	0.6	88.5
Roger Williams C					
Main Campus	0.0	3.1	0.8	0.6	89.4
Providence	0.0	3.6	1.8	1.9	92.7
Regina-Newport C	0.2	1.1	0.3	1.0	97.2
U of Rhode Island	0.3	1.3	0.9	0.4	95.9
SOUTH CAROLINA					
Aiken Tech C	0.0	31.8	0.0	0.0	68.2
Allen U	0.0	100.0	0.0	0.0	0.0
Anderson C	0.0	8.3	0.0	0.1	91.3
Baptist C at Charleston	0.0	21.6	0.2	0.0	74.0
Beaufort Tech C	0.5	45.0	0.5	1.9	52.0
Benedict C	0.0	97.8	0.0	0.0	0.0
Central Wesleyan C	0.0	10.6	0.0	0.0	87.2
Chesterfield-					
Marlboro Tech	0.8	30.9	0.0	0.0	68.3
Citadel Military C	0.0	3.3	0.3	1.0	95.0
Claflin C	0.0	99.9	0.0	0.0	0.0
Clemson U	0.1	2.3	0.3	0.1	96.0
Clinton JC	0.0	100.0	0.0	0.0	0.0
Coker C	1.1	21.5	0.7	0.7	76.0
C of Charleston	0.1	5.4	0.4	0.4	92.8
Columbia Bible C	0.5	1.3	0.0	0.4	94.1
Columbia C	0.2	19.8	0.3	0.2	78.7
Columbia JC	0.0	67.3	0.3	1.2	31.2
Converse C	0.0	2.6	0.4	0.0	97.0
Denmark Tech C	0.2	95.1	0.0	0.0	4.4
Erskine C & Seminary	0.0	5.4	0.2	0.3	91.3
Florence Darlington Tech	0.5	34.9	0.3	0.9	63.1
Francis Marion C	0.0	12.6	0.1	0.1	87.1
Friendship C	0.0	94.8	0.0	0.9	0.0
Furman U	0.0	3.6	0.4	0.5	95.4
Greenville Tech C	0.2	17.2	0.9	0.7	80.5
Horry-Georgetown					
Tech C	0.0	29.2	0.6	0.3	69.8
Lander C	0.3	15.1	0.3	0.2	83.0
Limestone C	0.1	15.8	0.2	0.0	83.6
Medical U of S C	0.2	5.6	0.7	0.0	92.8
Midlands Tech C	0.3	32.5	0.8	1.6	64.5
Morris C	0.0	100.0	0.0	0.0	0.0
Newberry C	0.1	13.4	0.4	0.1	86.0
Nielsen Electronics Inst	0.0	69.9	1.0	0.7	28.5
North Greenville C	0.0	21.5	0.0	0.0	75.3
Orangeburg Calhoun					
Tech C	0.1	50.9	0.1	0.1	48.6
Piedmont Tech C	0.2	34.1	0.0	0.1	65.6
Presbyterian C	0.0	4.1	0.0	0.0	95.4
Rice C	0.0	80.0	0.0	0.0	20.0
Rutledge C	0.0	49.7	0.0	0.0	50.3
Sherman C of Straight					
Chiropractic	0.0	0.0	0.0	0.0	92.3
South Carolina St C	0.0	98.8	0.0	0.0	0.7
Spartanburg					
Methodist C	0.0	17.9	0.0	0.0	81.8
Spartanburg Tech C	0.1	17.4	0.9	0.5	81.2
Sumter Area Tech C	0.2	52.2	0.2	0.5	46.8
Tri-County Tech C	0.1	9.9	0.2	0.5	89.2
Trident Tech C	0.3	25.5	1.3	0.6	72.0
U of South Carolina					
Aiken	0.3	14.7	0.8	0.4	83.6
Beaufort	0.5	23.1	1.0	1.6	73.6
Coastal Carolina	0.2	7.4	0.6	0.1	91.0
Columbia	0.1	14.1	1.0	0.6	83.1
Lancaster	0.0	14.5	0.5	0.2	84.9
Salkehatchie	0.0	22.6	0.0	0.0	77.4
Spartanburg	0.3	8.5	0.9	0.8	89.5
Sumter	0.5	18.0	0.5	0.5	80.5
Union	0.0	27.3	0.0	0.0	72.7
Voorhees C	0.0	94.9	0.0	0.0	1.0
Williamsburg Tech C	0.0	68.9	0.0	0.2	30.9
Winthrop C	0.1	14.0	0.2	0.2	84.0
Wofford C	0.0	9.1	0.7	0.5	88.8
York Tech C	0.1	22.8	0.2	0.1	76.7
SOUTH DAKOTA					
Augustana C	0.8	0.2	0.3	0.1	98.3
Black Hills St C	5.8	1.0	0.4	0.9	90.9
CC of North Central					
U Center	0.8	0.0	0.0	0.0	99.2
Dakota St C	0.7	0.2	0.3	0.0	98.3
Dakota Wesleyan U	4.3	3.9	0.4	1.2	88.0
Freeman JC	1.8	0.0	1.8	0.0	89.5
Huron C	4.9	12.7	0.3	0.3	81.4
Mt Marty C	1.3	0.8	0.4	0.0	93.9
National C	3.8	3.7	0.2	6.6	84.6
Northern St C	0.9	0.1	0.1	0.1	98.6
Oglala Sioux CC	87.1	0.0	0.0	0.0	12.9
Presentation C	6.4	0.0	0.0	0.0	92.4
Sinte Gleska C	77.8	0.0	0.0	0.0	22.2
Sioux Falls C	0.9	3.2	0.0	0.0	95.1
South Dakota Sch					
of Mines & Tech	0.7	0.3	1.0	0.4	91.5
South Dakota St U	0.6	0.1	0.2	0.1	97.1
U of South Dakota					
Main Campus	2.6	0.5	0.2	0.1	96.6
Springfield	2.9	2.1	3.5	0.1	91.4
Yankton C	2.4	15.3	0.4	2.7	77.6
TENNESSEE					
American Baptist C					
of ABT Seminary	0.0	81.3	0.0	0.0	0.7
Aquinas JC	0.0	11.0	1.5	0.7	86.8
Belmont C	0.0	4.4	0.0	0.0	91.2
Bethel C	0.2	10.8	0.0	0.0	83.1

	American Indian	Black	Asian	Hispanic	White
TENNESSEE—Continued					
Bristol C	0.0	3.0	0.0	0.0	97.0
Bryan C	0.0	0.5	0.0	0.0	97.1
Carson-Newman C	0.0	4.2	0.1	0.1	94.5
Christian Bros C	0.2	16.1	0.6	0.3	78.0
Cumberland C	0.0	10.8	0.0	0.0	84.0
David Lipscomb C	0.1	3.4	0.0	0.2	96.1
Draughon's JC	0.0	68.4	0.0	0.7	30.5
Draughon's JC					
of Business					
Knoxville	0.0	20.0	0.7	0.7	78.7
Nashville	0.0	45.0	0.0	0.0	54.0
Edmondson JC	0.2	32.8	0.0	0.2	66.7
Fisk U	0.0	97.4	0.0	0.0	0.0
Freed-Hardeman C	0.4	3.8	0.3	0.3	93.1
Free Will Baptist					
Bible C	0.4	0.2	0.2	0.2	98.8
Hiwassee C	0.0	5.4	0.0	0.0	87.3
John Gupton C	0.0	38.5	0.0	0.0	61.5
Johnson Bible C	0.3	0.0	0.0	0.3	98.3
King C	0.0	1.6	0.0	0.0	92.4
Knoxville Bus C	0.0	26.1	0.0	0.0	73.0
Knoxville C	0.0	89.0	0.7	0.6	0.6
Lambuth C	0.0	13.5	0.2	0.0	85.1
Lane C	0.0	98.7	0.0	0.0	0.1
Lee C	0.5	6.3	0.0	2.2	88.0
LeMoyne-Owen C	0.0	98.0	0.0	0.0	0.0
Lincoln Memorial U	0.1	5.8	0.1	0.3	92.2
Martin C	0.0	18.2	0.3	0.0	79.1
Maryville C	0.2	4.1	0.0	0.3	92.9
McKenzie C	0.0	49.2	0.0	0.0	50.8
Memphis Acad of the Arts	0.0	9.4	0.5	0.0	88.2
Mid-South Bible C	0.0	7.7	0.0	0.0	90.1
Milligan C	0.1	1.9	0.0	0.0	97.2
Morristown C	0.0	99.1	0.0	0.0	0.0
Nashville St Tech Inst	0.3	18.6	1.1	0.4	79.4
O'More Sch of Design	0.0	0.0	0.0	0.0	100.0
Scarritt C	0.0	7.1	0.0	0.0	92.9
Southern Missionary C	0.4	4.6	0.9	4.7	85.9
Southwestern at					
Memphis	0.0	3.1	0.3	0.4	94.0
St Tech Inst at Knoxville	0.7	7.7	0.9	0.5	89.7
at Memphis	0.3	30.8	0.3	0.7	67.5
St U & CC System of Tenn					
Austin Peay St U	0.4	19.7	0.6	1.5	76.3
E Tennessee St U	0.3	3.3	0.5	0.4	95.2
Memphis St U	0.1	18.8	0.4	0.2	78.9
Mid Tenn St U	0.2	9.2	0.1	0.3	88.7
Tenn St U	0.1	72.6	0.5	0.3	21.4
Tenn Tech U	0.2	2.7	0.4	0.2	91.9
Chattanooga St					
Tech CC	0.4	14.9	0.9	0.3	83.5
Cleveland St CC	0.3	3.7	0.1	0.3	94.6
Columbia St CC	0.2	8.4	0.1	0.0	91.1
Dyersburg St CC	0.0	14.8	0.0	0.0	84.8
Jackson St CC	0.0	15.9	0.0	0.0	84.1
Motlow St CC	0.1	6.5	0.0	0.0	92.9
Roane St CC	0.1	2.9	0.4	0.2	96.4
Shelby St CC	0.2	67.6	0.1	0.3	31.7
Volunteer St CC	0.3	4.2	0.7	0.3	94.0
Walters St CC	0.0	4.5	0.1	0.7	94.5
Steed C	0.0	2.3	0.0	0.0	97.0
Tenn Inst of Electronics	0.0	6.6	0.0	0.0	93.4
Tennessee Temple U	0.1	1.5	0.1	0.9	96.7
Tennessee Wesleyan C	0.4	6.2	0.4	0.2	88.5
Tomlinson C	1.1	21.9	1.1	3.0	72.9
Trevecca Nazarene C	0.2	8.1	0.0	0.2	89.6
Tusculum C	0.0	7.3	0.0	0.0	91.5
Union U	0.0	4.6	0.2	0.0	94.8
U of the South	0.0	0.5	0.3	0.1	98.9
U of Tennessee					
Chattanooga	0.3	13.0	0.9	0.5	84.1
Health Science Center	0.0	4.5	1.3	0.0	94.2
Knoxville	0.2	5.6	0.4	0.3	90.8
Martin	0.1	16.6	0.3	0.3	78.8
Vanderbilt U	0.1	2.9	0.5	0.4	95.2
TEXAS					
Abilene Christian U	0.1	3.1	0.2	0.8	94.3
Abilene Christian U					
at Dallas	0.0	5.8	0.0	1.8	90.1
Alvin CC	1.3	10.0	0.2	12.5	74.7
Amarillo C	0.7	3.9	0.9	7.0	84.9
American Tech U	0.7	10.9	1.2	7.3	79.4
Angelina C	0.4	13.1	0.4	1.3	84.8
Angelo St U	0.1	4.5	0.4	9.1	85.4
Austin C	0.5	5.5	1.3	4.6	85.9
Austin CC	0.4	10.3	0.1	10.0	77.0
Bauder Fashion C	0.9	7.9	1.1	9.0	81.0
Baylor C					
of Dentistry	0.0	1.4	0.0	0.0	98.6
Baylor C					
of Medicine	0.0	3.6	5.5	0.0	90.9
Baylor U	0.4	1.7	0.6	1.9	94.4
Bee County C	0.0	2.7	0.4	41.3	55.0
Bishop C	0.0	71.4	0.3	0.2	0.1
Blinn C	0.0	7.8	3.8	1.3	77.6
Brazosport C	0.5	7.8	0.7	9.9	80.1
Central Texas C	0.4	16.2	2.3	8.8	71.0
Cisco JC	0.3	9.1	0.1	12.0	78.4
Clarendon C	0.0	8.7	0.0	3.7	87.7
C of the Mainland	1.7	17.4	0.7	8.7	69.7
Concordia Lutheran C	0.3	3.9	0.0	7.8	84.4
Cooke County C	0.5	3.7	0.1	1.2	86.7
Dallas Baptist C	0.5	18.5	0.8	5.2	72.6
Dallas Bible C	0.9	4.0	0.4	3.6	88.3
Dallas Christian C	0.7	1.5	0.0	4.4	92.6
Dallas County CC District					
Brookhaven C	0.4	3.1	2.0	3.9	90.6
Cedar Valley C	0.3	44.0	0.7	3.3	51.8
Eastfield C	0.6	6.3	1.5	5.1	86.5
El Centro C	0.7	46.2	1.8	8.1	43.2
Mountain View C	0.7	24.0	1.5	8.0	65.8
Northlake C	0.5	2.7	1.3	3.3	92.3
Richland C	0.3	3.7	1.8	2.1	92.1
Del Mar C	0.4	3.6	0.5	44.8	50.8
Devry Inst of Tech	0.2	14.2	1.1	7.6	77.0
E Texas Baptist C	0.3	6.1	0.1	0.4	90.5
E Texas St U	0.8	15.9	0.3	2.5	77.0
El Paso County CC	0.6	5.3	0.9	61.5	30.2
Frank Phillips C	1.3	3.6	0.0	1.7	93.2
Galveston C	0.3	18.0	0.8	11.0	59.1
Grayson County JC	0.1	4.7	0.3	1.2	93.6
Gulf Coast Bible C	0.6	4.0	0.0	1.2	91.7
Hardin-Simmons U	0.1	2.6	0.2	3.9	93.1
Henderson County JC	0.4	17.7	0.4	4.2	75.4
Hill JC	0.6	8.2	0.5	5.2	85.2
Houston Baptist U	0.2	5.8	2.4	5.6	81.1
Houston CC	0.3	21.9	1.6	10.0	59.0
Howard C at Big Spring	0.6	3.6	0.8	14.0	80.2
Howard Payne U	0.2	7.2	0.4	6.6	85.0
Huston-Tillotson C	0.0	64.4	0.4	2.2	1.5
Incarnate Word C	0.3	11.6	0.9	36.5	44.8
Jacksonville C	0.4	7.7	1.6	0.8	62.8
Jarvis Christian C	0.0	98.3	0.0	0.0	0.5
Kilgore C	0.0	13.6	0.0	1.6	84.6

	American Indian	Black	Asian	Hispanic	White
TEXAS—Continued					
Lamar U	1.6	20.0	0.2	7.1	67.2
Laredo JC	0.1	0.3	0.1	87.9	6.8
Lee C	0.4	16.5	0.3	10.9	70.3
LeTourneau C	0.0	0.6	0.5	0.4	94.2
Lon Morris C	0.0	15.9	0.0	2.3	69.5
Lubbock Christian C	0.6	4.2	0.5	4.1	87.0
McLennan CC	0.3	14.9	0.3	5.4	77.9
McMurry C	0.3	9.7	0.6	6.2	83.1
Midland C	0.2	5.6	0.5	10.5	82.5
Midwestern St U	0.3	4.7	1.1	3.4	90.4
Miss Wade's Fashion C	0.0	10.7	1.2	5.4	78.6
Navarro C	0.1	11.3	2.1	4.2	81.9
North Harris County C	0.5	5.2	1.3	6.2	86.1
North Texas St U	0.2	10.2	0.3	3.2	80.7
Odessa C	0.4	3.5	0.2	17.4	77.3
Our Lady of the Lake U	0.6	9.0	0.4	53.8	31.7
Pan American U	0.2	0.3	0.8	78.4	18.8
Panola JC	0.1	20.9	0.1	0.2	76.3
Paris JC	0.4	8.3	2.1	1.0	85.0
Paul Quinn C	0.7	97.5	0.0	0.2	0.7
Ranger JC	0.3	23.2	0.0	9.9	63.9
Rice U	0.2	3.6	1.4	3.6	90.4
St Edward's U	0.4	7.4	0.3	26.0	50.7
St Mary's U					
of San Antonio	0.3	5.0	0.5	46.2	43.5
Sam Houston St U	0.2	7.5	0.7	3.4	87.4
St Phillip's C	0.5	23.5	0.7	39.4	35.0
San Antonio C	0.4	6.1	1.1	42.5	46.6
San Jacinto C					
Central	0.3	3.0	1.1	7.4	81.1
North	0.3	9.8	1.2	7.6	80.5
Schreiner C	0.4	3.1	0.7	11.1	78.9
Southern Bible C	0.0	6.6	0.0	4.9	85.2
Southern Methodist U	0.1	3.3	0.8	3.0	90.2
South Plains C	0.3	6.9	0.7	15.1	75.5
SW Adventist C	1.5	6.7	1.8	10.0	75.8
SW Assembly of God C	2.2	0.4	0.1	5.2	91.2
SW Christian C	0.0	87.7	0.0	0.0	1.4
Southwestern U	0.1	2.1	0.3	4.1	92.2
SW Texas JC	0.2	1.6	0.2	53.8	42.9
SW Texas St U	0.3	3.5	0.2	9.9	85.4
Stephen F Austin St U	0.2	3.7	0.3	1.7	93.9
Sul Ross St U	0.3	2.4	0.3	35.3	61.0
Tarrant County JC	0.5	9.3	1.2	4.6	84.1
Temple JC	0.3	9.7	0.7	6.4	82.4
Texarkana CC	0.1	20.3	0.4	0.7	78.0
Texas A & M U					
Main Campus	0.2	0.9	0.8	3.1	92.5
Galveston	0.3	0.3	0.9	2.7	94.7
Prairie View A&M U	0.0	98.0	1.9	0.0	0.0
Tarleton St U	0.2	1.9	0.4	1.8	94.5
Texas Christian U	0.3	4.9	0.4	2.3	92.2
Texas C	0.0	88.2	0.0	0.0	0.0
Texas Lutheran C	0.2	4.9	0.4	7.1	86.7
Texas Southern U	0.1	66.6	0.1	0.9	0.2
Texas Southmost C	0.1	0.1	0.2	62.5	16.5
Texas St Tech Inst					
Amarillo	0.1	2.0	1.1	11.4	84.1
Harlingen	0.0	0.2	0.2	82.6	15.6
Sweetwater	0.3	5.6	0.0	19.7	74.4
Waco	0.1	10.1	0.8	7.7	78.5
Texas Tech U	0.2	2.0	0.6	3.8	92.4
Texas Wesleyan C	0.5	10.8	0.5	5.5	76.9
Texas Woman's U	0.1	14.8	1.1	8.6	70.2
Trinity U	0.1	1.3	0.6	8.4	85.8
Tyler JC	0.2	16.0	0.1	1.1	81.7
U of Dallas	0.3	2.1	1.7	6.2	84.1
U of Houston					
Central Campus	0.5	11.4	2.7	7.0	73.9
Clear Lake City	0.5	3.6	2.7	4.5	87.1
Downtown C	0.4	30.1	3.2	16.0	37.5
Victoria	0.0	1.9	0.0	11.8	86.0
U of Mary Hardin-Baylor	0.2	6.9	0.0	7.7	79.0
U of St Thomas	0.5	9.3	1.5	16.2	63.6
U System South Texas					
Corpus Christi St U	0.5	2.1	0.1	31.4	65.3
Laredo St U	0.0	0.0	0.0	85.7	12.7
Texas A & I U	0.1	5.4	0.6	50.5	35.6
U of Texas					
Austin	0.1	2.5	1.2	8.3	85.9
Arlington	0.5	6.7	2.6	3.6	81.6
Dallas	0.3	3.3	1.7	3.5	85.9
El Paso	0.4	2.4	0.7	43.8	45.0
Health Science Centers					
Dallas	0.5	7.8	0.5	5.9	85.3
Houston	0.2	7.3	3.0	5.4	82.1
San Antonio	0.2	3.4	2.0	18.3	76.2
Medical Branch					
at Galveston	0.5	7.1	0.9	6.2	84.7
Permian Basin	0.2	2.6	1.5	6.7	86.7
San Antonio	0.2	2.1	1.4	22.6	73.0
Tyler	0.2	7.0	0.4	0.6	91.4
Vernon Regional JC	1.7	11.7	1.2	5.4	80.0
Victoria C	0.2	4.7	0.2	15.3	79.2
Wayland Baptist C	1.1	5.9	0.3	8.3	82.8
Weatherford C	0.3	2.8	0.5	1.5	88.6
Western Texas C	0.4	4.8	0.0	7.5	87.1
West Texas St U	0.3	3.7	0.6	6.0	86.7
Wharton County JC	0.1	11.8	0.6	12.2	74.7
Wiley C	0.0	92.3	0.0	0.0	0.2
UTAH					
Brigham Young U					
Main Campus	1.3	0.1	0.5	0.3	94.3
Hawaii	0.4	0.2	28.0	0.6	33.3
Stevens Henager C	0.6	0.6	2.7	6.3	89.7
U of Utah	0.7	0.5	1.5	1.8	93.8
Utah St U	0.4	0.6	0.6	0.7	90.7
Southern Utah St C	3.8	0.7	0.5	0.6	92.7
Weber St C	0.8	1.8	1.4	3.2	89.1
C of Eastern Utah	2.2	1.7	0.3	8.2	87.3
Dixie C	0.7	0.5	0.4	0.7	96.5
Snow C	0.9	1.3	0.5	0.2	97.0
Utah Tech C					
Provo	2.8	0.2	4.5	1.7	89.7
Salt Lake	1.2	0.4	1.3	2.3	94.0
Westminster C	0.8	2.6	1.3	4.1	85.7
VERMONT					
Bennington C	0.0	1.7	1.2	0.7	92.0
Burlington C	1.0	3.1	0.0	1.0	94.8
Champlain C	0.0	0.5	0.2	0.1	99.0
C of St Joseph					
the Provider	0.0	0.9	0.0	0.0	97.7
Goddard C	0.8	9.6	0.1	2.2	86.2
Green Mountain C	0.0	0.2	0.6	0.2	98.6
Marlboro C	0.0	1.0	0.0	1.4	96.6
Middlebury C	0.2	2.5	0.7	0.9	94.3
Norwich U					
Main Campus	0.4	2.5	0.5	1.7	93.0
Vermont C	0.2	2.5	0.2	0.0	96.1
St Michael's C	0.0	0.1	0.0	0.1	97.5

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FACT-FILE—Continued

	American Indian	Black	Asian	Hispanic	White
VERMONT—Continued					
Sch for International Training	0.0	6.9	1.1	1.1	86.8
S Vermont C	0.0	5.4	0.0	1.6	88.5
Trinity C	0.0	0.4	0.0	0.4	98.4
U of Vermont & St Ag C	0.1	0.5	0.3	0.5	98.0
Vermont St C System					
Castleton St C	0.3	0.6	0.1	0.4	98.3
CC of Vermont	0.0	0.0	0.0	0.0	99.3
Johnson St C	0.3	0.8	0.0	0.2	98.2
Lyndon St C	0.1	0.4	0.2	0.4	98.5
Vermont Tech C	0.0	0.0	0.0	0.3	99.5
VIRGINIA					
Averett C	0.2	11.3	0.9	0.5	87.1
Bluefield C	0.0	3.5	0.0	0.0	90.5
Bridgewater C	0.1	2.7	0.0	0.1	96.3
C of William & Mary					
Main Campus	0.2	3.1	1.8	1.0	92.0
Christopher Newport C	0.2	10.9	1.4	0.8	85.7
Richard Bland C	0.5	12.1	1.6	0.8	84.5
Eastern Mennonite C & Seminary	0.0	2.4	0.8	0.7	92.0
Emory & Henry C	0.0	1.5	0.5	0.5	97.2
Ferrum C	0.1	11.5	0.1	0.1	87.9
George Mason U	0.4	2.9	2.9	2.2	89.9
Hampden-Sydney C	0.0	1.1	0.0	0.0	97.9
Hampton Inst	0.1	96.5	0.1	0.1	1.3
Hollins C	0.0	1.7	0.0	0.0	96.8
James Madison U	0.1	2.9	0.2	0.4	96.4
Liberty Baptist C	1.2	2.8	0.3	0.7	92.4
Longwood C	0.0	4.9	0.3	0.0	94.7
Lynchburg C	0.0	3.0	0.4	0.4	94.9
Mary Baldwin C	0.0	1.9	1.2	0.9	95.8
Marymount C of Va	0.3	6.4	1.9	2.0	75.9
Mary Washington C	0.1	2.1	1.2	1.0	95.5
National Business C	0.0	41.4	0.0	0.0	58.1
Norfolk St U	0.0	96.1	0.1	0.0	2.9
Old Dominion U	0.3	8.0	1.3	0.8	88.2
Radford U	0.7	3.5	0.4	0.7	94.8
Randolph-Macon C	0.4	1.1	0.6	0.6	96.1
Randolph-Macon Woman's C	0.0	1.3	0.0	0.4	95.9
Roanoke C	0.0	1.8	0.2	0.2	97.8
St Paul's C	0.0	96.6	0.0	0.0	0.0
Shenandoah C Conservatory of Music	0.0	7.3	0.3	0.3	92.0
Southern Seminary JC	0.0	0.7	0.4	1.1	97.4
Sweet Briar C	0.0	0.8	0.0	0.0	95.4
U of Richmond	0.3	1.9	0.2	0.2	95.9
U of Virginia					
Main Campus	0.0	7.2	1.5	0.2	90.4
Clinch Valley C	0.0	2.8	0.5	0.3	96.3
Virginia Commonwealth U	0.3	20.2	1.5	0.6	77.2
Virginia Intermont C	0.6	4.5	0.4	3.4	88.8
Virginia Military Inst	0.0	3.4	1.7	0.8	93.2
Virginia Polytechnic Inst & St U	0.1	2.9	1.1	0.3	94.7
Virginia St U	0.1	95.2	0.2	0.3	3.5
Virginia St CC System					
Blue Ridge CC	0.1	3.0	0.2	0.1	96.5
Central Va CC	0.1	9.7	0.3	0.0	89.9
Dabney Lancaster CC	0.0	5.4	0.0	0.0	94.6
Danville CC	0.1	20.5	0.0	0.0	79.4
Eastern Shore CC	0.4	37.8	0.0	0.4	61.5
Germanna CC	0.2	11.1	0.7	0.7	87.3
J Sargeant Reynolds CC	0.6	34.8	1.1	0.4	62.8
John Tyler CC	0.4	24.0	0.6	0.1	74.9
Lord Fairfax CC	0.1	6.2	0.2	0.5	92.8
Mountain Empire CC	0.2	3.5	0.0	0.0	96.4
New River CC	0.1	3.9	0.3	0.2	94.6
N Virginia CC	0.3	7.9	3.4	1.9	83.6
Patrick Henry CC	0.0	12.8	0.2	0.1	86.8
Paul D Camp CC	0.4	46.8	0.1	0.0	52.7
Piedmont Va CC	0.0	10.0	0.6	0.1	88.4
Rappahannock CC	1.5	30.5	0.1	0.0	67.4
Southside Va CC	0.4	38.4	0.0	0.4	59.9
SW Virginia CC	0.1	1.3	0.0	0.0	98.6
VIRGINIA—Continued					
Virginia St CC system—Continued					
T Nelson CC	0.4	32.5	1.8	0.9	64.1
Tidewater CC	0.3	20.0	2.3	0.7	76.2
Virginia Highlands CC	0.0	2.0	0.1	0.4	96.9
Virginia Western CC	0.0	9.7	0.6	0.2	87.4
Wytheville CC	0.2	2.8	0.1	0.1	96.5
Virginia Union U	0.0	99.8	0.2	0.0	0.0
Virginia Wesleyan C	0.4	9.0	0.6	0.6	84.1
Washington & Lee U	0.0	1.8	0.0	0.2	97.6
WASHINGTON					
Bellevue CC	0.6	2.3	1.8	0.8	91.8
Big Bend CC	0.4	1.9	0.5	7.2	82.2
Centralia C	0.9	0.3	0.8	0.7	95.9
Central Wash U	1.2	2.0	1.4	1.5	92.3
City C	1.2	3.9	2.0	2.0	90.2
Clark C	1.1	0.6	1.9	0.6	96.1
Columbia Basin CC	0.7	1.1	1.1	2.7	93.8
Cornish Inst	2.0	3.2	1.6	1.4	88.7
Eastern Wash U	2.4	1.4	0.9	1.7	90.1
Evergreen St C	1.2	3.2	1.2	1.4	92.4
Ft Steilacoom CC	0.8	10.3	4.4	3.9	77.0
Fort Wright C of Holy Names	0.2	1.0	0.5	4.8	92.6
Gonzaga U	0.4	0.4	2.0	0.8	90.1
Grays Harbor C	3.5	0.5	0.5	0.9	93.7
Green River CC	1.5	1.3	1.7	1.1	93.0
Griffin C	2.4	9.7	10.7	2.7	71.6
Highline CC	1.7	2.1	3.9	1.1	91.0
Lower Columbia C	1.3	0.2	2.3	0.5	94.0
Lutheran Bible Inst of Seattle	0.4	1.5	1.5	0.4	94.8
Northwest C of the Assemblies of God	0.2	0.6	0.6	0.6	96.0
Olympia Tech CC	1.6	0.7	3.2	0.9	90.3
Olympic C	1.9	3.7	3.7	2.2	88.5
Pacific Lutheran U	0.5	1.9	1.1	0.6	94.1
Peninsula C	6.4	0.1	1.7	1.0	89.9
Puget Sound C of Bible	0.6	0.6	0.0	1.3	97.5
St Martin's C	0.9	2.3	8.7	1.4	83.0
Seattle CC District					
Central	2.6	12.2	10.5	2.4	53.6
North	1.2	2.6	4.4	1.5	87.8
South	1.6	4.0	4.5	1.9	83.2
Seattle Pacific U	1.3	1.0	2.8	0.7	90.3
Seattle U	0.8	4.9	6.7	1.0	75.9
Shoreline CC	0.7	1.0	1.8	1.0	90.6
Skagit Valley C	1.4	1.0	1.8	1.9	91.2
Tacoma CC	2.1	10.9	3.6	1.8	73.5
U of Puget Sound	0.7	3.2	5.5	0.4	89.3
U of Washington	0.9	3.4	10.7	1.5	80.8
Walla Walla C	0.6	1.3	1.5	1.4	79.0
Walla Walla CC	1.3	4.8	0.8	1.9	89.3
Washington St CC District 17					
Edmonds CC	0.9	1.9	1.7	1.0	90.9
Everett CC	1.5	1.4	1.7	1.0	90.3
Spokane CC	1.6	1.3	1.0	1.1	94.8
Spokane Falls CC	1.7	2.2	1.2	1.2	89.5
Washington St U	0.8	2.0	2.0	1.0	90.2
Wenatchee Valley C	2.9	0.8	0.8	1.0	90.9
Western Washington U	0.9	0.9	1.3	0.6	95.5
Whatcom CC	6.6	0.3	1.0	1.0	89.9
Whitman C	0.6	1.0	2.7	1.0	93.6
Whitworth C	1.1	1.4	3.3	1.2	88.0
Yakima Valley CC	4.1	1.4	1.1	6.2	81.6
WEST VIRGINIA					
Alderson Broaddus C	0.0	3.0	0.4	0.4	94.5
Appalachian Bible C	0.0	0.9	0.0	0.0	99.1
Beckley C	0.0	9.1	0.4	0.0	90.5
Bethany C	0.0	1.5	0.5	0.9	94.2
Bluefield St C	0.1	11.8	0.1	0.3	86.8
Concord C	0.1	6.8	0.3	0.3	92.4
Davis & Elkins C	0.2	3.4	0.8	1.2	93.3
Fairmont St C	0.1	3.7	0.3	0.3	95.4
Glenville St C	0.1	2.5	0.3	0.2	96.6
Marshall U	0.5	3.4	0.2	0.2	94.7
WEST VIRGINIA—Continued					
Ohio Valley C	0.0	5.5	0.4	0.4	93.7
Parkersburg CC	0.4	0.9	0.4	0.1	98.1
Potomac St C	0.1	5.8	0.3	0.1	93.8
Salem C Main Campus	0.4	9.5	0.5	0.9	87.6
Shepherd C	0.4	2.2	0.3	0.0	97.1
Southern W Va CC	1.9	4.2	0.3	0.2	93.4
U of Charleston	0.2	3.8	0.0	0.5	94.6
West Liberty St C	0.2	3.0	0.1	0.2	94.4
West Virginia C of Tech	0.0	17.0	0.0	0.0	83.0
West Virginia Inst of Tech	0.2	7.2	0.4	0.3	85.3
West Virginia N CC	0.1	2.7	0.4	0.4	96.3
West Virginia St C	0.2	17.2	0.3	0.2	80.6
West Virginia U	0.0	1.9	0.4	0.3	94.7
West Virginia Wesleyan C	0.1	3.4	0.5	0.2	94.5
Wheeling C	0.0	2.8	1.4	0.3	95.0
WISCONSIN					
Alverno C	0.2	5.2	0.4	1.0	90.1
Beloit C	0.0	3.1	1.4	0.7	93.2
Blackhawk Tech Inst	1.0	4.0	0.3	0.4	94.3
Cardinal Stritch C	0.4	7.7	0.7	0.4	90.7
Carroll C	0.1	3.2	0.2	4.9	91.3
Carthage C	0.1	4.1	0.3	0.9	94.2
Concordia C	0.2	13.5	1.3	0.2	83.1
District One Tech Inst	0.3	0.2	0.2	0.0	99.4
Edgewood C	0.3	2.5	0.5	0.2	92.9
Fox Valley Tech Inst	2.5	0.3	0.9	2.0	94.3
Gateway Tech Inst					
Kenosha	0.1	3.4	0.4	1.7	94.4
Racine	0.1	8.4	0.1	1.3	90.0
Holy Redeemer C	0.0	2.5	0.0	2.8	94.7
Lakeland C	0.9	8.8	0.3	0.9	85.9
Lakeshore Tech Inst	0.0	0.3	0.6	0.2	98.9
Lawrence U	0.1	1.8	0.5	0.5	95.6
Madison Area Tech C	0.6	2.1	3.1	0.9	90.1
Madison Business C	0.8	3.9	0.0	0.8	91.4
Marian C of Fond Du Lac	1.2	1.0	0.0	0.2	98.5
Marquette U	0.3	5.1	1.2	2.2	90.3
Mid-State Tech Inst	2.1	0.2	0.5	0.7	96.5
Milton C	0.1	3.0	0.1	0.1	94.5
Milwaukee Area Tech C	0.8	13.9	0.8	1.9	82.3
Milwaukee Inst of Art & Design	0.4	2.0	0.0	0.4	96.5
Milwaukee School of Engineering	0.0	6.3	0.0	0.3	91.2
Milwaukee Stratton C	1.0	43.8	0.0	3.4	51.9
Moraine Park Tech Inst	2.0	0.4	2.0	1.5	94.2
Mt Mary C	0.1	8.7	1.3	0.9	88.9
Mt Senario C	12.2	4.2	0.3	2.1	75.9
Nicolet C & Tech Inst	3.3	0.0	0.3	0.0	95.2
North Central Tech Inst	2.8	0.0	0.0	0.0	97.0
Northeast Wisconsin Tech Inst	1.8	0.3	0.4	0.1	97.4
Northland C	5.6	3.5	0.8	0.6	88.5
Northwestern C	0.0	0.8	0.0	0.0	99.2
Ripon C	0.2	1.9	0.4	1.4	94.7
St Francis de Sales C	0.0	0.0	0.0	3.4	96.6
St Norbert C	0.1	0.4	0.2	0.0	98.8
Silver Lake C	0.7	1.4	1.1	0.4	95.7
SW Wisconsin Voc-Tech Inst	0.0	0.0	0.8	0.0	98.2
U of Wisconsin					
Eau Claire	0.4	0.5	0.2	0.2	97.6
Green Bay	0.3	1.0	2.1	0.6	93.3
La Crosse	0.2	0.6	0.3	0.3	98.1
Madison	0.2	2.2	1.0	1.0	93.9
Milwaukee	0.7	7.3	0.9	1.6	87.3
Oshkosh	0.4	2.2	0.3	0.4	95.9
Parkside	0.3	4.6	0.9	1.8	92.1
Platteville	0.2	1.6	0.3	0.2	96.8
River Falls	0.2	0.9	0.2	0.1	97.3
Stevens Point	0.6	0.5	0.3	0.3	96.8
Stout	0.4	1.0	0.3	0.4	96.0
Superior	1.4	3.3	0.3	0.6	91.0
Whitewater	0.2	1.9	0.2	0.6	96.1
Center System	0.3	1.1	0.2	0.5	97.6
Viterbo C	0.0	1.0	0.3	0.2	96.8
Waukesha County Tech Inst	0.2	0.5	0.2	0.4	98.8
WISCONSIN—Continued					
W Wisconsin Tech Inst	2.2	0.2	0.5	2.4	94.6
Wisconsin Conservatory of Music	0.0	15.3	0.0	1.0	82.7
Wisconsin Voc-Tech Adult Education District	2.7	0.3	1.5	0.5	95.0
Wisconsin Lutheran C	0.0	2.1	0.0	0.0	97.9
Wisconsin Sch of Electronics	1.0	2.0	0.0	0.0	96.0
WYOMING					
Casper C	1.4	0.8	0.2	2.0	94.3
Central Wyoming C	18.9	2.3	0.0	4.8	72.0
Eastern Wyoming C	0.7	0.2	0.5	6.3	91.6
Laramie County CC	0.5	2.0	0.6	2.8	93.2
Northwest CC	0.2	0.1	0.0	2.0	97.2
Sheridan C	1.2	1.5	2.5	0.0	94.7
U of Wyoming	0.5	1.0	0.6	1.3	94.1
Western Wyoming CC	0.7	1.0	1.7	3.5	90.5
AMERICAN SAMOA					
American Samoa CC	0.0	0.0	97.0	0.1	2.9
GUAM					
U of Guam	0.8	2.4	69.7	1.6	20.2
PUERTO RICO					
American C of Puerto Rico	0.0	0.0	0.0	100.0	0.0
Antillian C	0.0	1.3	0.0	78.6	17.0
Bayamon Central U	0.0	0.1	0.1	99.8	0.1
Caguas City C	0.0	0.0	0.0	100.0	0.0
Caribbean U C	0.0	0.0	0.0	99.8	0.0
Catholic U of PR	0.0	0.0	0.0	100.0	0.0
Conservatory of Music of Puerto Rico	0.0	1.6	0.0	97.4	0.0
Electronic Data Processing C of Puerto Rico	0.0	0.0	0.0	100.0	0.0
Colegio U Del Turabo	0.0	0.0	0.0	100.0	0.0
Puerto Rico JC	0.0	0.0	0.0	100.0	0.0
Inst Comercial de Puerto Rico JC	0.0	0.0	0.0	100.0	0.0
Inst Technico Comercial JC	0.0	0.0	0.0	100.0	0.0
Inter-American U					
Aguadilla	0.0	0.0	0.0	98.1	1.9
Arecibo	0.0	0.0	0.0	99.0	1.0
Barranquitas	0.0	0.0	0.0	98.0	2.0
Fajardo	0.0	0.0	0.0	98.0	2.0
Guayama	0.0	0.0	0.0	98.0	2.0
Metropolitan	0.0	0.0	0.0	98.0	2.0
Ponce	0.0	0.0	0.0	98.0	2.0
San German	0.0	0.0	0.0	98.0	2.0
International Inst of the Americas of World U	0.0	0.0	0.0	99.0	0.0
Ramirez C of Business & Tech	0.0	0.0	0.0	100.0	0.0
San Juan Tech CC	0.0	0.0	0.0	100.0	0.0
U Politecnica de Puerto Rico	0.0	0.0	0.0	100.0	0.0
U de Ponce	0.0	0.0	0.0	100.0	0.0
U of Puerto Rico					
Cayey U C	0.0	0.0	0.0	100.0	0.0
Humacao U C	0.0	0.0	0.0	100.0	0.0
Mayaguez	0.0	0.0	0.0	100.0	0.0
Medical Sciences	0.0	0.0	0.0	100.0	0.0
Regional C's Administration	0.0	0.0	0.0	100.0	0.0
Rio Piedras	0.0	0.0	0.0	100.0	0.0
U of the Sacred Heart	0.0	0.0	0.0	100.0	0.0
TRUST TERRITORY					
CC of Micronesia	0.0	0.0	100.0	0.0	0.0
VIRGIN ISLANDS					
C of the Virgin Islands	0.0	84.2	0.6	1.0	6.7

Financial Payoff of a College Education Comes Faster for Women, U.S. Study Finds

WASHINGTON

In the job market, a college education offers more immediate rewards to women than to men, a long-range study by the National Center for Education Statistics has found.

The study, which has followed more than 23,000 members of the high-school graduating class of 1972, found that earnings of those who went to college eventually caught up with those of people the same age who did not continue their education beyond high school.

The catching-up point occurred earlier for women, the study found. Only four years after high-school graduation, the women with college degrees had a median hourly wage of $4.72 per hour, compared with $4.27 for those with no college education.

For men in the study group, those with college degrees still had not achieved as high a median hourly wage as those with only a high-school education at the time of the latest comparison in 1979. At that time, seven years after graduating from high school, the male college graduates were getting a median hourly wage of $6.88, compared with $7.06 for those with no college education.

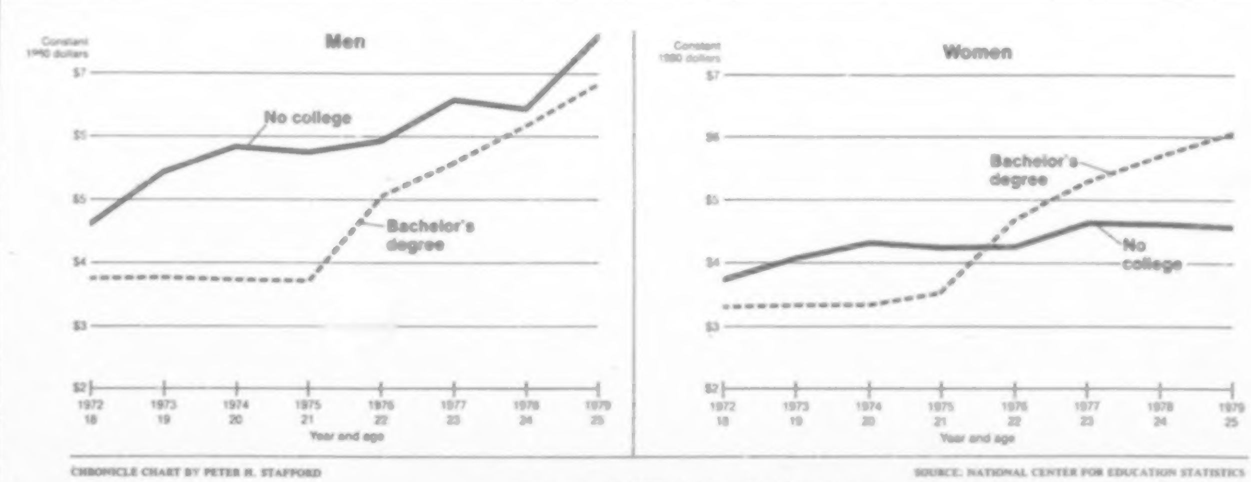
Students who work while in college usually take part-time jobs that pay less per hour than they could have earned if they had chosen to work full time instead of going to college, a report on the study said.

The study indicated that work experience was more important for men than for women. It takes longer for male college graduates to overcome the advantage of the longer experience of those who began full-time work right after high school.

For women, work experience appears to count for relatively less—and educational credentials for relatively more—than is the case with their male classmates. College-educated women caught up almost immediately after graduation with the wage rates of women of the same age with no college education, the N.C.E.S. report said.

"Over the long term," the report concluded, "the financial returns of a college education may repay the actual costs of schooling, as well as the wages lost by not working during the college years.

"The [long-range study group's] wage histories up to age 25 show that college probably does pay for young women, but it is too early to say the same for young men." —J.M.



CHRONICLE CHART BY PETER H. STAFFORD

SOURCE: NATIONAL CENTER FOR EDUCATION STATISTICS

Earnings of 1972 high-school graduates who went on to get college degrees are compared above with those of classmates who did not go to college.

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News Summary

Articles on inside pages

Schools of medicine, engineering, and agriculture get nearly all the research dollars that industry gives to universities. Story on Page 4.

Censorship of literary works can pose serious problems not only for writers but also for readers and literature scholars, members of the Modern Language Association were told. Story on Page 6.

Economists have not devised a satisfactory way to measure the effects of education on the country's economic growth. Story on Page 9.

Business gave colleges and universities more than $1-billion in 1981—10.7 per cent more than in the previous year. Story on Page 14.

Academic quality at colleges and universities may be more seriously hurt by across-the-board budget cuts than by selective reductions in programs. Story on Page 10.

A balanced budget and a winning season have helped gain faculty members' respect for the athletic program at Southern Methodist University. Story on Page 19.

Average faculty pay is 7.6 per cent higher this year than last, according to the latest Chronicle Survey. Story on Page 25.

A glossy magazine for popular audiences is the wrong kind of publication to come out of a scholarly organization—so say some members of the Western History Association. Story on Page 29.

Argentine students have been more politically active since the end of the war with Britain over the Falkland Islands. Story on Page 23.

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The Reagan Administration at Mid-Term: Its Record on Higher-Education Issues

The Issues	What the Administration Tried to Do	What Has Happened Thus Far
Guaranteed Student Loans	To curb growth of federal spending for loans.	Federal spending has almost doubled since 1980, although the number of loans is expected to drop by 22 per cent from fiscal 1981 to 1982.
	To require all students to demonstrate financial need to qualify for a loan.	Students whose families earn more than $30,000 a year must demonstrate financial need to qualify for a loan.
	To charge a 10-per-cent fee on loans.	A 5-per-cent fee is charged on loans.
	To reduce federal interest subsidies.	Interest subsidies have not been reduced.
Pell Grants	To cut the budget by more than 40 per cent.	Little change in the budget since 1980.
	To reduce aid to middle-income students by denying grants to most students whose families earn more than $18,000 a year.	Grants are available to students whose families earn up to about $26,000 a year.
	To require that information on all grant applications be checked against income-tax forms.	About half of all grant applications must be checked against tax forms.
Social Security Student Benefits	To bar college students from entering the program after August 1, 1981.	College students are barred from entering the program after May 1, 1982.
	To reduce gradually the payments to students already receiving benefits, and to eliminate the program by 1984.	Payments to students already receiving benefits will be reduced gradually, and the program will be eliminated by 1985.
Other Student-Aid Programs	To eliminate Supplemental Educational Opportunity Grants and State Student Incentive Grants.	The budget for supplemental grants and incentive grants has been cut by 4 per cent.
	To provide no new funds for National Direct Student Loans, and to bar colleges with default rates over 25 per cent from receiving additional loan money.	New funds for direct loans have been cut by more than 35 per cent over the last two years. Colleges with default rates of over 25 per cent are barred from receiving additional loan money.
Miscellaneous College Aid Programs	To eliminate many small special-purpose grants to colleges, including aid for cooperative education, libraries, and campus programs serving veterans; graduate fellowships for women and minority-group students; and aid to states for higher-education planning.	Grants for state planning have been eliminated. Most other programs have been continued with reduced budgets.
Department of Education	To abolish the department, replacing it with a foundation with reduced regulatory powers. To transfer many education programs to other federal agencies.	No change in the department's structure. Legislation incorporating the Administration's foundation proposal has not yet been submitted to Congress.

Continued on Page 18, Column 1

Court Ties Title IX Only to Programs that Get Direct Aid

By **CHARLES S. FARRELL**

A U.S. appeals court has ruled that the federal government cannot cut off financial aid to students at Hillsdale College simply because the institution has refused to promise it won't discriminate against women.

In a 2-to-1 decision, the U.S. Court of Appeals for the Sixth Circuit rejected Hillsdale's claim that it is not a recipient of federal aid. But the court said the college was subject to Title IX regulations only on programs that actually get government money. (Excerpts from both the majority and the dissenting opinions appear on Pages 11-14.)

The decision conflicts with a ruling last summer by another federal appellate court. The U.S. Court of Appeals for the Third Circuit ruled that Title IX of the Education Amendments of 1972, the federal law prohibiting sex bias in education, applies to an entire college even when the institution receives no federal support ex-

Continued on Page 11, Column 1

Publishers Sue 9 Professors

Charge them and New York U. with copyright infringement

By **STACY E. PALMER**

In the first action of its kind, a group of publishers has sued New York University, nine of its faculty members, and a photocopying shop near its Washington Square campus for copyright infringement.

The suit, filed in a U.S. district court in New York, seeks a permanent injunction against further illegal photocopying and an unspecified award for damages to the copyright owners.

In addition to issues of copyright law, the case raises questions about the personal liability of college employees in such matters. (See story on Page 26.)

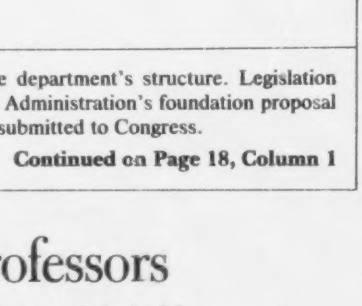
One official of the Association of American Publishers, which is coordinating the lawsuit on behalf of nine publishing companies, said that colleges and universities, as well as individual professors, should understand that they—aside from those who

Continued on Page 26, Column 1

Popular Scholarship on the American West?

Can a magazine prove attractive to both scholarly and popular markets? The Western History Association is grappling with that question as it considers problems that confront *American West,* a magazine the association founded in 1964 to bridge the gap between the two audiences.

See the "Publishing" section, Page 29.



Despite Falling Profits, Corporations Increase Gifts to Higher Education

NEW YORK

Business corporations increased their gifts to higher education by 10.7 per cent in 1981, despite a decline of 4.2 per cent in their profits, according to the Council for Financial Aid to Education.

Those gifts amounted to $1.14-billion, or about half of 1 per cent of the corporations' pretax net income, the C.F.A.E. estimates.

Gifts Total $2.9-Billion

Total corporate contributions to educational and charitable institutions during the year were estimated at $2.9-billion, or 1.24 per cent of pretax net income. An estimated 39.3 per cent of total corporate giving was earmarked for education.

It was the second consecutive year in which corporate support for education increased despite lower earnings. In 1980, when corporations' profits declined by 4 per cent, their contributions to education increased by 15.7 per cent, according to C.F.A.E. figures.

"These figures suggest that the corporate community is trying hard to maintain its commitment to higher education despite reduced resources," said John R. Haire, president of C.F.A.E.

Officials of the council said corporations were able to increase their contributions at a time of declining profits by giving through company foundations, which may put aside some money in times of prosperity and pay out more than they receive in leaner years. In 1981 corporate foundations gave $493.3-million in grants but took in only $361.6-million.

The estimates of corporate giving were based on an annual survey conducted jointly by C.F.A.E. and the Conference Board, both located in New York.

C.F.A.E. is a nonprofit organization promoting voluntary support of higher education; the Conference Board is a research organization concerned with business economics.

Corporations are permitted to take tax deductions for contributions up to 10 per cent of their pretax net income.

Education Gets Largest Share

Of total contributions made by the 789 companies that submitted data for 1981, C.F.A.E. reported, 36.7 per cent went to education, 33.6 per cent to health and welfare organizations, 11.9 per cent to cultural and art organizations, 11.7 per cent to community activities, and 6.1 per cent to other organizations. —JACK MAGARRELL

Corporate Giving to Colleges

	Corporate contributions to education	1-year change	As per cent of pretax net income	As per cent of all giving by corporations
1967	$ 315,000,000	+ 5.0%	0.40%	38.0%
1968	355,000,000	+12.7%	0.40%	35.3%
1969	375,000,000	+ 5.6%	0.43%	35.5%
1970	320,000,000	−14.7%	0.42%	40.2%
1971	345,000,000	+ 7.8%	0.40%	39.9%
1972	365,000,000	+ 5.8%	0.36%	36.2%
1973	410,000,000	+12.3%	0.33%	34.9%
1974	445,000,000	+ 8.5%	0.33%	37.1%
1975	450,000,000	+ 1.1%	0.34%	37.4%
1976	560,000,000	+24.4%	0.34%	37.7%
1977	665,000,000	+18.8%	0.34%	37.1%
1978	780,000,000	+17.3%	0.34%	37.4%
1979	890,000,000	+14.1%	0.35%	38.9%
1980	1,030,000,000	+15.7%	0.42%	39.6%
1981	1,140,000,000	+10.7%	0.49%	39.3%

SOURCE: COUNCIL FOR FINANCIAL AID TO EDUCATION

Excerpts from Chief Judge's Dissent in 'Hillsdale College v. HEW'

Continued from Preceding Page

penses. H.E.W. advises that in the year ending June 30, 1978, approximately one-fourth of the Hillsdale student body received aid under these various programs. It seems clear to me that each of these programs provides funds which when paid to the college are used for the general support of the educational program of the college as a whole.

Section 1681(a) of Title IX provides as follows: "No person in the United States, shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any educational program or activity receiving Federal financial assistance. . . ." Under the circumstances outlined above, it seems obvious to me that Congress intended for its prohibition on sex discrimination to apply to a college like Hillsdale when it was "receiving Federal financial assistance" in the fashion Hillsdale is receiving such.

In the recent decision by the Supreme Court in *North Haven Bd. of Educ.* v. *Bell, supra,* the Supreme Court of the United States held that discrimination against female employees of a school receiving federal funds was barred. The critical language of Justice Blackmun's opinion for a total of six justices of the Supreme Court bears quotation at this point:

"Our starting point in determining the scope of Title IX is, of course, the statutory language. Section 901(a)'s broad directive that 'no person' may be discrimnated against on the basis of gender appears on its face, to include employees as well as students. Under that provision, employees, like other 'persons,' may not be 'excluded from participation in,' 'denied the benefits of,' or 'subjected to discrimination under' education programs receiving federal financial support.

"Employees who directly participate in federal programs or who directly benefit from federal grants, loans, or contracts clearly fall within the first two protective categories described in §901(a). In addition, a female employee who works in a federally funded education program is 'subjected to discrimination under' that program if she is paid a lower salary for like work, given less opportunity for promotion, or forced to work under more adverse conditions than are her male colleagues.

"*There is no doubt that 'if we are to give [Title IX] the scope that its origins dictate, we must accord it a sweep as broad as its language.'* Because §901(a) neither expressly nor impliedly excludes employees from its reach, we should interpret the provision as covering and protecting these 'persons' unless other considerations counsel to the contrary. After all, Congress easily could have substituted 'student' or 'beneficiary' for the word 'person' if it had wished to restrict the scope of §901(a). (Emphasis added.)"

It seems obvious to me that the Supreme Court's opinion quoted above directly rejects Judge Brown's conclusion in this case that the prohibition of sex discrimination in the statute is 1) solely directed at the financial grant programs and 2) cannot properly be applied to prohibit sex discrimination in the entire educational institution. Clearly the court's application of the sex discrimination ban to all employees of the school (including those not directly involved in the educational process) was a much wider interpretation of the statute than H.E.W. has followed in our instant case.

"I dissent from my colleagues' disturbingly narrow interpretation of this remedial statute."

The majority opinion continued to find in the broad language of the sponsors of Title IX support for including employee discrimination within Title IX's prohibition of sex discrimination in educational activities. Without repeating the Court's legislative history or its postenactment history, I incorporate Sections B and C of the majority opinion by reference and rely upon the majority's obvious inclination to give the statute its full intended effect.

I now turn to the Third Circuit's treatment of the identical problem which we face in our instant case. There, as here, the educational institution concerned objected vigorously to any "generalized nonprogrammatic, or institutional basis" for Title IX application. Judge Garth's opinion, with which I am in complete agreement, dealt with the "program specific" argument which my colleagues emphasize by adopting the response filed by the American Association of University Women:

"However the Supreme Court ultimately defines 'program,' it cannot conclude that the more general the scope and purpose of the funding, the more restrictive the coverage of this remedial civil rights statute will be. That result would be logically inconsistent. Yet Grove City asks this court to decide that an institution whose entire purpose is educational is exempt from coverage when it is financed with federal funds that can be used for virtually any educational purpose instead of a clearly limited function. The absurd result if this approach is followed to its logical conclusion is that general higher education aid would never bring the college under Title IX coverage because no specific program within the College would be earmarked to benefit from the federal funding."

In addition Judge Garth quoted another commentator to support his result:

"[I]f two programs, one receiving federal aid directly and one not, are both administered by the same local agency for the education of essentially the same group of students, and if the funding of the former facilitates the latter by freeing funds for its use, or if discrimination in the latter affects the former by inhibiting or prohibiting a student's participation in that program, then both will be considered part of the same program for purposes of bringing the latter within the reach of Title IX."

Judge Garth concluded his discussion of the "program specific" issue in the following manner:

"Where the federal government furnishes indirect or nonearmarked aid to an institution, it is apparent to us that the institution itself must be the 'program.' Were it otherwise, and if it had to be demonstrated that each individual component of an integrated educational institution had in fact received the particular monies for a particular purpose, no termination sanction could ever effectively be imposed.

"We conclude that the remedy to be ordered for failure to comply with Title IX is as extensive as the program benefited by the federal funds involved. Because the federal grants made to Grove's students necessarily inure to the benefit of the entire College, the 'program' here must be defined as the entire institution of Grove City College. Thus, Grove is incorrect in claiming that the program-specific provisions of the statute preclude Title IX coverage when indirect aid is involved."

There is no reason why the government of the United States should grant funds to colleges which refuse to certify that they intend in using those funds to obey the laws of this country prohibiting discrimination against females.

Hillsdale College has, of course, a right to refuse to sign such a certificate.

But equally clearly Hillsdale should have no right to relief in the federal courts to secure federal financing of its general educational program where it refuses to indicate, as required, that it will comply with federal Title IX mandates.

Title IX and Title VII are closely related statutes designed to give broad equal protection rights which a long history of discrimination has denied to women and minorities. The enactment of Title IX in 1972 forbidding discrimination against women in education was patterned after Title VI of the Civil Rights Act of 1964 which proscribed discrimination in any federally assisted program on the basis of race, color, or national origin; both statutes have parallel prohibitions and identical enforcement mechanisms similarly described. In fact, "the drafters of Title IX explicitly assumed that it would be interpreted and applied as Title VI has been during the preceding eight years." *Cannon* v. *University of Chicago,* 441 U.S. 677, 696 (1979). Moreover the goals to which the statutes aspire are indeed similar. "Title IX, like its model Title VI, sought to accomplish two related, but nevertheless somewhat different, objectives. First, Congress wanted to avoid the use of federal resources to support discriminatory practices; second, it wanted to provide individual citizens effective protection against those practices." Thus, as a final argument for an interpretation of the important statute before us that would not annul its broad nondiscriminatory purpose, the words of Senator Humphrey, one of the Senate sponsors of Title VI, as quoted by the Supreme Court are apposite, substituting only the word sex for the word race:

"Congress intended for its prohibition on sex discrimination to apply to a college like Hillsdale."

"Simple justice requires that public funds, to which all taxpayers of [both sexes] contribute, not be spent in any fashion which encourages, entrenches, subsidizes, or results in [sex] discrimination."

Simple justice, recognition of Title IX's basic and broad remedial purpose and the other foregoing reasons dictate that I dissent from my colleagues' disturbingly narrow interpretation of this remedial statute. I would affirm the constitutionality of Title IX as applied in this case and the legality of the regulations issued by H.E.W. which are in dispute.

If I were writing for the majority of this court, I would also remand to the agency for careful consideration of the timing of its order cutting off funds. Accordingly I suggest fund termination that will not affect students presently enrolled but only those who may enter in the future. At issue in this regard could be severe impact upon the education of students who are not in any way responsible for this controversy. Additionally it may well be that the college itself will see fit to comply with the agency's regulation at the beginning of the school year after the regulation's legality and constitutionality are completely established.

This less harsh prospective remedy appears to be consistent with the Title IX statutory scheme. Indeed, the remedies portion of the Act, Section 902, 20 U.S.C. §1684 (1976), provides that compliance with the statute "*may* be effected" by termination of funding or "by any other means authorized by law." (Emphasis added.)

Agency adoption of the suggested equitable remedy would be one which is "authorized by law" and would fall within the permissive grant of authority to fashion remedies. This conclusion is buttressed by the Supreme Court's observation in *Cannon* v. *University of Chicago,* 441 U.S. 677, 704-05 n.n. 38 & 39 (1979), that Congress intended the use of measures less severe than total fund cutoff where the statutory objectives of Title IX could be furthered by less heroic means.

NCAA Can Prevent Abuses, Many College Chiefs Say

By JOHN A. CROWL

A majority of college presidents who responded to a Chronicle Survey on athletic policy think the National Collegiate Athletic Association is effective in preventing abuses in intercollegiate athletics.

An overwhelming majority of them think the N.C.A.A. is capable of preventing such abuses.

The survey, conducted for *The Chronicle* by John Minter Associates, elicited responses from 81 chief executive officers at member institutions of the N.C.A.A.'s top section—Division I.

Fifty-three per cent of the presidents felt the N.C.A.A. was doing an effective job of preventing abuse in sports now, and 95 per cent of them said they felt that the association could be effective in preventing abuses.

Some other findings:

▶ Eighty-two per cent disagreed with the proposal that one way to end abuses in sports would be to turn football and basketball into professional programs.

▶ Eighty-six per cent felt that success in intercollegiate athletics makes the institution's job of raising funds easier.

▶ Ninety-one per cent disagreed with the suggestion that coaches ought to be granted tenure.

▶ Two-thirds said none of their athletic programs produced surplus revenue.

▶ At only 6 per cent of the institutions do football and men's basketball both produce a surplus of revenue over expenses; at 19 per cent, football produces a surplus; at 20 per cent, men's basketball produces a surplus.

The presidents also reported that the proportion of students on athletic scholarships who receive their degrees in four years (an average of 57 per cent) is higher than the proportion of all students who receive their degrees on time (an average of 55 per cent).

In five years, 65 per cent of the scholarship athletes have received their degrees, compared with 57 per cent of all students.

The chief executives said that they spend only a small amount of their time—an average of 7 per cent—on matters related to intercollegiate athletics.

The presidents were also asked how their intercollegiate athletics programs were financed, but not enough responses were received to tabulate the results.

Several presidents commented on policies toward intercollegiate athletics. Some samples:

▶ "I am increasingly skeptical that anything meaningful will be done to curb the excesses in collegiate athletics. I am appalled by the recruiting practices of otherwise reputable presidents. There is just too much money to be gained by recruiting a seven-foot center who cannot meet minimal entrance requirements. I am also appalled by the way the N.C.A.A. has been captured by the big football powers and now, I fear, by the big basketball powers."

▶ "An exclusive and representative body of institutional presidents should be instituted as the broad policy-making body for national intercollegiate athletics. It is too much to ask the president to attend the annual N.C.A.A. meeting, which deals with the details of athletic management. While it would be difficult to separate the activities and responsibilities for a presidential group, it would be well worth the effort and perhaps would lead to some necessary reforms."

▶ "Most of the current problems in intercollegiate athletics could be solved by putting the emphasis on the *student* part of the student athlete; simplifying N.C.A.A. rules and stiffening penalties for violations; requiring institutions to have complete control over booster-club expenditures; and integrating athletic departments with the rest of the campus."

▶ "Abuses can be controlled if serious violations are punished, if rules are simplified, if coaches, athletic directors, and senior university officers—including the president and trustees—really (not just rhetorically) involve themselves."

▶ "Only the trainer and the physician should be allowed on the field during a game. The coaching staff should be restricted to the stands. In short, let college ball be a game, not a business."

Issues in Intercollegiate Athletics: Views of 81 College Presidents

	Strongly agree	Agree	Disagree	Strongly disagree
The N.C.A.A. is an effective organization for the prevention of abuses in intercollegiate athletics.	10%	43%	38%	9%
The N.C.A.A. can be an effective organization for the prevention of abuses in intercollegiate athletics.	53%	42%	4%	1%
One way to end abuses in athletics is simply to turn big-time football and basketball into professional programs.	10%	8%	8%	74%
Success in intercollegiate athletics has a positive effect on a president's effectiveness as a fund-raiser.	41%	45%	7%	7%
Success in intercollegiate athletics has a positive effect on a president's effectiveness as an academic leader.	4%	26%	44%	26%
Success in intercollegiate athletics has a positive effect on the length of time that one serves as president.	7%	23%	36%	34%
Coaches should be granted tenure.	1%	8%	21%	70%

Note: Survey data are based on responses of presidents of 81 colleges and universities that compete in Division I of the National Collegiate Athletic Association.

SOURCE: SURVEY FOR THE CHRONICLE BY JOHN MINTER ASSOCIATES

SYSTEMS

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If this year's W-2 form and tax report generation process is slow, cumbersome, and labor-intensive, start planning an efficient, cost-effective alternative for January, 1984.

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USIA LINKAGES ANNOUNCEMENT

The office of Academic Programs of the United States Information Agency announces a program of support for institutional partnerships between American and foreign colleges and universities. This program has two broad goals: to promote mutual cultural understanding, and to strengthen the research and teaching abilities of American and foreign institutions.

Priority will be given to linkages which advance the discussion and understanding of key issues in relationships between the two countries and which contribute to the academic excellence of the participating institutions. Applications on behalf of the collaborating American and foreign institutions are to be submitted by the American partners. Institutions submitting an application should be prepared to: assign faculty or staff abroad for teaching, lecturing or research; maintain that person on salary; and receive visiting faculty from their partner institution. USIA's Office of Academic Programs proposes to underwrite the travel costs of foreign and American participants and, where needed, provide salary supplements for American or foreign participants. Support for overhead will not be available. Projects supported by USIA should last a minimum of two years and a maximum of three years, the total request to USIA should not exceed $50,000 covering eligible expenses of both institutions for the two or three year period.

Primary focus will be on the humanities, social sciences, communication and education, and on countries where there is potential to contribute significantly to academic exchange efforts. Applicants should also be aware of some of the following considerations for eligibility:

- Soundness of academic program and contribution to advancing the frontiers of international dialogue and bilateral issues of mutual concern to both partners.
- Quality in approaches to project design, implementation and site selection.
- Level of demonstrated participant interest from the foreign partner and evidence of support at the vice president/chancellor/provost and participating department levels.
- Demonstration that the project can be successfully concluded during USIA funding or can be sustained through other financial support.
- Demonstrated impact through community outreach and/or consortial arrangements.

For detailed guidelines and instructions, please write as appropriate to the Branch Chief for: Africa, the Near East and South Asia, East Asia and the Pacific, Latin America, Scandinavia, or Canada at USIA, E/AE, Rm. 730, 1776 Pennsylvania Avenue, N.W., Washington, D.C. 20547.

Applicants are urged to make early requests for information describing the world area concerned. All applications will require foreign university and/or appropriate ministry endorsement. The deadline for completed applications is April 1, 1983.

Personal & Professional

Faculty Salaries Up 7.6 Pct. Since 1981-82, but Gain Is Smallest in Several Years

By JACK MAGARRELL

This year's average faculty salary is 7.6 per cent higher than last year's, the Chronicle Survey has found, compared with a rise of 8.4 per cent reported by the survey for 1981-82.

The findings (see the table on Page 28) indicated a break had occurred in a pattern of average salary increases that had grown every year since 1976-77.

The smaller increase this year coincides with a continuing recession in the national economy and a lower inflation rate. During the latest 12-month period for which the Consumer Price Index is available—the year ending November 30—the rate of inflation was only 4.6 per cent.

With some institutions forced by budget crises to freeze this year's salaries at last year's levels, the Chronicle Survey found that about a fifth of all faculty members received no pay raises for 1982-83.

A Fifth Get Raises over 15 Pct.

A more fortunate fifth of all faculty members received raises of more than 15 per cent.

The Chronicle Survey's data on salaries were obtained directly from faculty members in a scientifically designed sample representing public and private colleges and universities of various types.

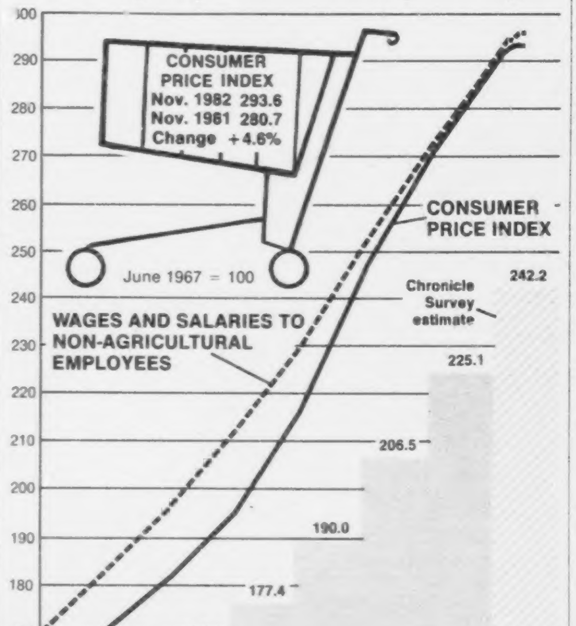
The results show that average salaries at all private institutions are slightly lower than those at public institutions. At the same time, salaries at the private institutions have increased by a larger percentage than those at public colleges and universities.

For faculty members of all ranks at all types of public institution, the average salary this year is $26,218, an increase of 7 per cent over last year's average. The comparable average for faculty members at private institutions is $25,625, a one-year increase of 9.3 per cent.

Among Ph.D.-granting universities, average salaries are higher at private institutions than at public ones. Full professors at the

Continued on Page 27, Column 3

Faculty Pay and the Cost of Living



SOURCES: DEPARTMENT OF LABOR, DEPARTMENT OF COMMERCE, JOHN MINTER ASSOCIATES, AND AMERICAN ASSOCIATION OF UNIVERSITY PROFESSORS

COMPUTERS

Student and Staff Discounts; 'Insider' Trustees

Big discounts are being offered by the Rochester Institute of Technology to encourage its students, faculty members, and staff members to buy their own computers.

The institute, which requires all students to acquire "computer literacy" before they graduate, worked out an agreement with the Digital Equipment Corporation that will reduce the price of a $4,800 computer system, for example, to $2,800.

Further encouragement is offered by the institute in the form of financing plans, lease arrangements with options to buy, sharing of purchases or lease of a computer by two or more students, and including the computer as a cost of education in calculating student aid.

Institute officials say the purchase of individual computers will be voluntary and will not affect tuition rates. Students who do not buy or lease personal computers will be able to use similar equipment in a laboratory.

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The advice of trustees on expansion of Grinnell College's computer program carries the authority of two industry insiders:

Robert N. Noyce, a Grinnell graduate and founder of the Intel Corporation, is a pioneer in the computer-microchip industry.

Steven Jobs is chairman of the board of the Apple Computer Company.

Grinnell's board has voted to spend up to $2-million in the next four years to expand computer facilities and services on the campus.

•

An awkward job for computers, librarians report, is cataloguing libraries' collections of manuscripts and archives, because computer-system formats are designed for regular books and periodicals.

To solve this problem, the U.S. Department of Education has given Yale University $400,000 to work with other institutions in developing a way to handle manuscripts and archival materials through the computer system of the Research Libraries Information Network.

The network is a program of the Research Libraries Group, a corporation owned by 24 major universities and independent research libraries. (The network is located at Jordan Quadrangle, Stanford, Cal. 94305; 415-328-0920.)

Working with R.L.G. and Yale in the joint project are Cornell and Stanford Universities and Stanford's Hoover Institution.

The aim is to establish a standard format flexible enough to allow the participating institutions, and eventually others, to pool bibliographic records of collections including maps, charts, artifacts, and assorted memorabilia as well as manuscripts in the library network's shared data base.

•

Teacher training at Indiana University's school of education now includes required study of the use of computers in instruction.

"We believe when the students go out to teach they will find computers available in every school and, in some cases, every classroom and library," says Richard Pugh, professor and associate dean for research and development.

—JACK MAGARRELL

'In' Box

A new ruling by the Civil Aeronautics Board, pending action by individual airlines, could encourage more colleges and universities to establish travel offices for their employees.

As part of the final stage of airline deregulation, the board ruled last month that airlines could authorize the payment of commissions to outlets of their choice. Under previous airline-industry agreements approved by the C.A.B., commissions were available only to travel agents approved by the airline industry—and, in any event, not to travel offices set up by businesses for their own employees.

In an effort to save money, a growing number of colleges have been providing their own travel services, mostly by contracting with outside travel agents. Some campus officials have predicted that if colleges could collect airline commissions, such services would become more widespread.

The effect of the C.A.B. ruling is in some doubt, however, because individual airlines may still choose to limit commissions to travel agents. A spokesman for the Air Traffic Conference, which represents the domestic-airline industry, said most airlines were unlikely to change their practices soon.

The conference opposes paying commissions to businesses' travel departments because they do not promote air travel to the general public. However, the increased flexibility granted by the C.A.B. could be attractive to new or struggling carriers, the spokesman said.

•

Scholars who travel abroad should note that as of January 1 U.S. passports cost more and last longer.

The price for first-time applicants was increased by the Department of State from $15 to $42, while renewal rates were raised from $10 to $35. The passports, which were previously valid for 5 years, can now be used for 10 years (except by applicants under 18 years old, for whom the 5-year limit will continue to apply).

Before the latest change, the State Department notes, the price of passports went up only $1 since 1932.

For free information about passports and other issues related to overseas travel, use a postcard to request the booklet *Your Trip Abroad* from the Bureau of Consular Affairs, Department of State, Room 6811, Washington 20520.

Other free publications—containing "traveler tips" for the Caribbean, China, Cuba, Eastern Europe, Greece, Mexico, and the Soviet Union—may be requested (again, postcards only) from Passport Services, Room 386, Department of State, 1425 K Street, N.W., Washington 20524.

That office also will provide a free pamphlet, *Visa Requirements of Foreign Governments*.

The same publications also may be obtained from passport agencies in 13 other cities: Boston, Chicago, Detroit, Honolulu, Houston, Los Angeles, Miami, New Orleans, New York, Philadelphia, San Francisco, Seattle, and Stamford, Conn.

Sections of Law and Guidelines on 'Fair Use'

Following are sections of the Copyright Act of 1976 dealing with the rights of copyright owners and "fair use" of copyrighted works for educational purposes.

Exclusive Rights in Copyrighted Works

Subject to [other provisions of the law] . . . , the owner of copyright under this title has the exclusive rights to do and to authorize any of the following:

(1) to reproduce the copyrighted work in copies or phonorecords;

(2) to prepare derivative works based upon the copyrighted work;

(3) to distribute copies or phonorecords of the copyrighted work to the public by sale or other transfer of ownership, or by rental, lease, or lending;

(4) in the case of literary, musical, dramatic, and choreographic works, pantomimes, and motion pictures and other audiovisual works, to perform the copyrighted work publicly; and

(5) in the case of literary, musical, dramatic, and choreographic works, pantomimes, and pictorial, graphic, or sculptural works, including the individual images of a motion picture or other audiovisual work, to display the copyrighted work publicly.

Limitations on Exclusive Rights: Fair Use

Notwithstanding the provisions of [the previous section] . . . , the fair use of a copyrighted work, including such use by reproduction in copies or phonorecords or by any other means specified by that section, for purposes such as criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research, is not an infringement of copyright.

In determining whether the use made of a work in any particular case is a fair use the factors to be considered shall include—

(1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;

(2) the nature of the copyrighted work;

(3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and

(4) the effect of the use upon the potential market for or value of the copyrighted work.

■

Following is the text of a 1976 "Agreement on Guidelines for Classroom Copying in Not-for-Profit Educational Institutions with Respect to Books and Periodicals," as adopted by 38 education organizations and the publishing industry.

The purpose of the following guidelines is to state the minimum and not the maximum standards of educational fair use under Section 107 of [the Copyright Act of 1976]. The parties agree that the conditions determining the extent of permissible copying for educational purposes may change in the future; that certain types of copying permitted under these guidelines may not be permissible in the future; and conversely that in the future other types of copying not permitted under these guidelines may be permissible under revised guidelines.

Moreover, the following statement of guidelines is not intended to limit the types of copying permitted under the standards of fair use under judicial decision and which are stated in Section 107 of the [act]. There may be instances in which copying which does not fall within the guidelines stated below may nonetheless be permitted under the criteria of fair use.

GUIDELINES

I. Single Copying for Teachers

A single copy may be made of any of the following by or for a teacher at his or her individual request for his or her scholarly research or use in teaching or preparation to teach a class:

A. A chapter from a book;

B. An article from a periodical or newspaper;

C. A short story, short essay or short poem, whether or not from a collective work;

D. A chart, graph, diagram, drawing, cartoon or picture from a book, periodical, or newspaper.

II. Multiple Copies for Classroom Use

Multiple copies (not to exceed in any event more than one copy per pupil in a course) may be made by or for the teacher giving the course for classroom use or discussion; *provided that*:

A. The copying meets the tests of brevity and spontaneity as defined below; *and*,

B. Meets the cumulative effect test as defined below; *and*,

C. Each copy includes a notice of copyright.

Definitions

Brevity

(i) Poetry: (a) A complete poem if less than 250 words and if printed on not more than two pages or, (b) from a longer poem, an excerpt of not more than 250 words.

(ii) Prose: (a) Either a complete article, story, or essay of less than 2,500 words, or (b) an excerpt from any prose work of not more than 1,000 words or 10 per cent of the work, whichever is less, but in any event a minimum of 500 words.

[Each of the numerical limits stated in "i" and "ii" above may be expanded to permit the completion of an unfinished line of a poem or of an unfinished prose paragraph.]

(iii) Illustration: One chart, graph, diagram, drawing, cartoon, or picture per book or per periodical issue.

(iv) "Special" works: Certain works in poetry, prose, or in "poetic prose" which often combine language with illustrations and which are intended sometimes for children and, at other times, for a more general audience fall short of 2,500 words in their entirety. Paragraph "ii" above notwithstanding, such "special works" may not be reproduced in their entirety; however, an excerpt comprising not more than two of the published pages of such special work and containing not more than 10 per cent of the words found in the text thereof may be reproduced.

Spontaneity

(i) The copying is at the instance and inspiration of the individual teacher, and

(ii) The inspiration and decision to use the work and the moment of its use for maximum teaching effectiveness are so close in time that it would be unreasonable to expect a timely reply to a request for permission.

Cumulative Effect

(i) The copying of the material is for only one course in the school in which the copies are made.

(ii) Not more than one short poem, article, story, essay, or two excerpts may be copied from the same author, nor more than three from the same collective work or periodical volume during one class term.

(iii) There shall not be more than nine instances of such multiple copying for one course during one class term.

[The limitations stated in "ii" and "iii" above shall not apply to current news periodicals and newspapers and current news sections of other periodicals.]

III. Prohibitions as to I and II Above

Notwithstanding any of the above, the following shall be prohibited:

(A) Copying shall not be used to create or to replace or substitute for anthologies, compilations, or collective works. Such replacement or substitution may occur whether copies of various works or excerpts therefrom are accumulated or produced and used separately.

(B) There shall be no copying of or from works intended to be "consumable" in the course of study or of teaching. These include workbooks, exercises, standardized tests and test booklets and answer sheets, and like consumable material.

(C) Copying shall not:

(a) substitute for the purchase of books, publishers' reprints, or periodicals;

(b) be directed by higher authority;

(c) be repeated with respect to the same item by the same teacher from term to term.

(D) No charge shall be made to the student beyond the actual cost of the photocopying.

Technology Called the 'Real' Copyright Villain

In the struggle between copyright owners and users of their works, "advanced technology is the real culprit," says Irving L. Horowitz, the only college professor on the 16-member copyright committee of the Association of American Publishers.

Moreover, he says, to halt the "widespread" illegal copying that publishers say prompted them to sue New York University and nine of its professors last month, technology can provide the solution.

According to Mr. Horowitz, professor of sociology and political theory at Rutgers University and president of Transaction Books, copying machines can be made to record the type and amount of copying done. That information would be reported to a clearinghouse set up to determine royalty fees for copying that exceeds the accepted bounds of "fair use," he says.

The clearinghouse would handle all billing and payments for both publishers and users, he adds.

Case Before Supreme Court

Meanwhile, in a case scheduled to be heard soon by the Supreme Court, filmmakers are seeking to ban the use of videotape recorders. The Sony Corporation is appealing a lower court's decision that both the manufacturer and the owner of a Betamax recorder were guilty of copyright infringement.

Beyond that, the case is expected to provide additional guidance on the application of "fair use" of copyrighted works for educational purposes.

Although some videotaping without permission of the copyright owner is allowed, the appropriateness of copying entertainment programs as research materials is being challenged.

Regardless of how the Supreme Court rules, an official of the publishers' association said it would continue to sue both individuals and institutions over copyright violations.

Both the American Library Association and an *ad hoc* committee of educators have filed briefs in the Supreme Court to oppose restrictions on educational taping. —STACY E. PALMER

Nevada Regents Postpone Action on Tenure Rules

RENO

The board of regents of the University of Nevada system has, in effect, put off until later this month a decision on controversial changes in the university code that would, among other things, reduce the protection provided faculty members by tenure.

Last month the regents adopted the reforms as originally proposed in September. The revisions provide for annual reviews of the performance of tenured faculty members and for dismissal of those who fail to measure up after a second review a year later.

At the same time, however, the regents adopted revisions worked out in late November by faculty members, university presidents, and the board's committee on academic affairs.

Two Versions Before Board

Those revisions provide for the review of faculty performance every five years, rather than every year, and ease some other provisions that had drawn faculty criticism.

As a result, the regents now have two versions of the revised university code before them.

The board had at least 30 days to consider the amended version before the changes in the university code would take effect and, according to several observers, probably won't take final action until next month.

They could adopt all, some, or none of the changes in the amended version of the code revision.

The original changes were strongly criticized by faculty organizations, and many of them are not happy with the amended version.

The faculty senate at the University of Nevada at Las Vegas has hired Grant Sawyer, a lawyer and a former governor of Nevada, to represent faculty members if they decide to take legal action against the changes.

Gary L. Jones, president of the faculty senate at Las Vegas, said last month that no decision had been made on whether to challenge the changes in court. Such a decision would probably not be made until the regents take final action on the amendment, he added.

Faculty Salaries Up 7.6 Pct. Since 1981-82

Continued from Page 25

private universities receive an average salary of $38,911, compared with $34,774 for full professors at public universities.

The top fifth of full professors at private universities are paid $45,663 or more this year, compared with $40,145 or more for their counterparts at public universities.

At private colleges granting only the bachelor's degree, salaries of assistant professors average $18,033 this year, an increase of 8.6 per cent over last year's average.

Assistant professors in public two-year colleges get an average salary of $20,761, an increase of 7.4 per cent.

The survey of 1982-83 faculty salaries was designed and conducted for *The Chronicle* by John Minter Associates, a research organization in Boulder, Colo., that specializes in higher-education studies.

The survey was based on data received from 4,235 faculty members in a sample weighted to represent faculty members at institutions of all types except law and medical schools, proprietary institutions, private two-year colleges, and colleges with fewer than 500 students. The sample was drawn after faculty lists were updated in September, thus including those who were newly hired.

Results of the Chronicle Survey's two previous faculty-salary studies, in the fall of 1980 and the fall of 1981, have been roughly comparable to averages published in the following summer of each year by the American Association of University Professors. Unlike the Chronicle Survey, the A.A.U.P. salary report relies on data reported by the institutions rather than by the faculty members themselves.

The A.A.U.P.'s annual reports showed one-year increases in average salaries for faculty members of all ranks at all institutions of 4.7 per cent in the fall of 1976, 5.3 per cent in 1977, 6 per cent in 1978, 7.1 per cent in 1979, 8.7 per cent in 1980, and 9 per cent in 1981.

The fall of 1981 was the first time since the fall of 1972 that the average salary increase equaled or exceeded the inflation rate as measured by the government's Consumer Price Index, the A.A.U.P. said.

The 7.6-per-cent increase reported by the Chronicle Survey for 1982-83 indicates that the increase in average faculty salary will exceed the inflation rate again this year if the price trends of recent months continue through the rest of the academic year.

Solution to Last Issue's Chronicle Acrostic

"Shortly before he died, the old professor remembered class discussions, with Lyndon taking part, in which everyone agreed that unless government paid for the elections, politicians would be corrupted. . . ."—Ronnie Dugger, The Politician.

CHRONICLE SURVEY

Faculty Salaries for 1982-83

Estimates of college and university pay, by rank and type of institution

	Public				Private				Public and private combined			
	Average (a)	High (b)	Low (c)	Confidence interval (d)	Average (a)	High (b)	Low (c)	Confidence interval (d)	Average (a)	High (b)	Low (c)	Confidence interval (d)
Ph.D.-granting universities												
Professor	$34,774	$40,145	$29,403	$1,025	$38,911	$45,663	$32,158	$2,079	$36,222	$42,026	$30,367	$ 957
Associate professor	26,614	29,921	23,307	770	25,745	28,663	22,828	1,185	26,310	29,481	23,139	645
Assistant professor	21,299	23,701	18,897	673	21,593	24,015	19,171	793	21,402	23,811	18,993	514
All ranks	28,861	35,018	22,703	775	29,359	36,772	21,946	1,429	29,035	35,632	22,438	696
Others granting graduate degrees												
Professor	31,052	35,460	26,644	990	28,699	32,297	25,100	1,294	30,699	34,986	26,412	803
Associate professor	24,766	28,575	20,957	620	23,242	26,029	20,456	895	24,537	28,193	20,882	503
Assistant professor	20,540	23,137	17,943	664	19,487	21,685	17,288	671	20,382	22,919	17,845	490
All ranks	25,628	30,787	20,468	725	22,943	27,534	18,352	745	25,225	30,299	20,151	560
Those granting only bachelor's degree												
Professor	—	—	—	—	28,153	34,159	22,147	1,938	28,153	34,159	22,147	1,938
Associate professor	—	—	—	—	21,191	24,363	18,019	1,154	21,191	24,363	18,019	1,154
Assistant professor	—	—	—	—	18,033	20,039	16,028	591	18,033	20,039	16,028	591
All ranks	—	—	—	—	21,627	26,678	16,577	913	21,627	26,678	16,577	913
2-year colleges with academic ranks												
Professor	29,705	33,213	26,197	813	—	—	—	—	29,705	33,213	26,197	813
Associate professor	24,435	27,768	21,102	859	—	—	—	—	24,435	27,768	21,102	859
Assistant professor	20,761	23,536	17,985	846	—	—	—	—	20,761	23,536	17,985	846
All ranks	24,144	29,020	19,268	565	—	—	—	—	24,144	29,020	19,268	565
Institutions without academic ranks												
All faculty members	—	—	—	—	—	—	—	—	24,061	28,716	19,406	737
All institutions except those without academic ranks												
Professor	31,836	36,287	27,386	548	33,458	39,343	27,573	1,108	32,258	37,081	27,434	497
Associate professor	25,254	28,765	21,742	424	23,801	26,773	20,829	622	24,876	28,247	21,504	349
Assistant professor	20,844	23,432	18,257	416	20,043	22,289	17,798	392	20,636	23,134	18,137	296
All ranks	26,218	31,610	20,825	400	25,625	31,724	19,525	633	26,063	31,640	20,487	337

Increases over 1981-82 salaries

	Public				Private				Public and private combined			
	Increase in average salary (e)	Increases for individuals			Increase in average salary (e)	Increases for individuals			Increase in average salary (e)	Increases for individuals		
		Average (f)	High (g)	Low (h)		Average (f)	High (g)	Low (h)		Average (f)	High (g)	Low (h)
Ph.D.-granting universities												
Professor	6.7%	7.3%	14.1%	0.5%	8.6%	8.5%	15.8%	1.2%	7.4%	7.7%	14.7%	0.8%
Associate professor	8.2%	9.7%	18.8%	0.7%	11.7%	11.7%	21.2%	2.1%	9.4%	10.4%	19.6%	1.2%
Assistant professor	6.9%	7.1%	13.6%	0.7%	10.9%	10.9%	19.9%	1.8%	8.3%	8.5%	15.8%	1.1%
All ranks	7.2%	7.9%	15.7%	0.2%	9.9%	10.2%	19.9%	0.6%	8.2%	8.7%	17.2%	0.3%
Others granting graduate degrees												
Professor	5.4%	5.7%	11.0%	0.4%	8.3%	8.3%	15.4%	1.3%	5.8%	6.1%	11.7%	0.5%
Associate professor	6.9%	7.2%	14.0%	0.4%	8.6%	8.5%	15.9%	1.1%	7.2%	7.4%	14.3%	0.5%
Assistant professor	8.0%	7.6%	14.8%	0.5%	9.9%	10.1%	18.9%	1.2%	8.3%	8.0%	15.4%	0.6%
All ranks	7.4%	6.9%	13.8%	0.1%	8.0%	9.2%	18.0%	0.3%	7.5%	7.3%	14.4%	0.2%
Those granting only bachelor's degree												
Professor	—	—	—	—	8.4%	8.7%	16.5%	1.0%	8.4%	8.7%	16.5%	1.0%
Associate professor	—	—	—	—	9.1%	9.1%	16.9%	1.2%	9.1%	9.1%	16.9%	1.2%
Assistant professor	—	—	—	—	8.6%	8.6%	16.5%	0.8%	8.6%	8.6%	16.5%	0.8%
All ranks	—	—	—	—	8.6%	8.7%	17.2%	0.3%	8.6%	8.7%	17.2%	0.3%
2-year colleges with academic ranks												
Professor	6.1%	6.3%	12.0%	0.5%	—	—	—	—	6.1%	6.3%	12.0%	0.5%
Associate professor	6.7%	7.2%	13.6%	0.7%	—	—	—	—	6.7%	7.2%	13.6%	0.7%
Assistant professor	7.4%	7.6%	14.3%	0.8%	—	—	—	—	7.4%	7.6%	14.3%	0.8%
All ranks	6.2%	6.9%	13.7%	0.1%	—	—	—	—	6.2%	6.9%	13.7%	0.1%
Institutions without academic ranks												
All faculty members	—	—	—	—	—	—	—	—	5.2%	5.4%	10.6%	0.3%
All institutions except those without academic ranks												
Professor	6.0%	6.4%	12.3%	0.5%	8.5%	8.5%	15.9%	1.2%	6.7%	6.9%	13.2%	0.6%
Associate professor	7.3%	8.0%	15.4%	0.6%	10.4%	10.2%	18.8%	1.6%	8.0%	8.6%	16.3%	0.9%
Assistant professor	7.5%	7.5%	14.3%	0.7%	10.1%	10.0%	18.7%	1.4%	8.1%	8.1%	15.4%	0.8%
All ranks	7.0%	7.3%	14.4%	0.1%	9.3%	9.5%	18.6%	0.4%	7.6%	7.8%	15.5%	0.2%

(a) Salary figures for faculty members employed on other than nine-month contracts are adjusted to a nine-month basis. Salary data do not include earnings beyond base salary, fringe benefits, or the value of contributed services.
(b) About one-fifth of the faculty members reported salaries higher than the "high" salary (mean salary plus one mean deviation).
(c) About one-fifth of the faculty members reported salaries lower than the "low" salary (mean salary minus one mean deviation).
(d) There is a 95-per-cent probability that the reported average salary varies from the true average by no more than the amount in this column.
(e) Percentage increase in average base salary for 1982-83 over the 1981-82 average.
(f) The average of individual percentage increases.
(g) About one-fifth of the faculty members reported percentage increases higher than the "high" percentage (mean percentage plus one mean deviation).
(h) About one-fifth of the faculty members reported percentage increases lower than the "low" percentage (mean percentage minus one mean deviation).

Note: Survey data are based on responses of 4,235 faculty members who offered courses in the fall of 1980 through the fall of 1982. To include faculty members newly hired, the sample was drawn from faculty lists that were revised in September. Data for all ranks include instructors and lecturers.

Data are weighted to represent faculty members at colleges and universities of all types except law and medical schools, proprietary institutions, private two-year colleges, and colleges with fewer than 500 students.

Data for faculty members at each type of institution also are weighted to reflect the proportion of faculty members in each of eight discipline groups.

Technical inquiries about the survey design and sampling techniques should be addressed to John Minter Associates, P.O. Box 107, Boulder, Colo. 80306.

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News Summary

Articles on inside pages

The University of Washington is displaying what it says is a newly discovered painting by Leonardo da Vinci, but some scholars aren't so sure it's his work. Story on Page 3.

Finding new ways to use psychoanalysis to help the community is one goal of the Institute for Psychoanalysis in Chicago. Story on Page 6.

A "Hippocratic Oath" has been proposed by one economist to guide his colleagues in advising Presidents and other policymakers. Story on Page 17.

Minority-group writers believe their work is too often regarded more as a cultural curiosity and ethnic artifact than as serious literature. Story on Page 8.

Evaluations of doctoral programs in the biological sciences have been published by the National Academy Press. Fact-File on Pages 14-16.

State budget directors report they expect to collect $8-billion less revenue in the current fiscal year than they projected last spring. Story on Page 10.

Two vocal supporters of federal aid to colleges will give up seats on the House Budget Committee in the new Congress. Story on Page 19.

A U.S. judge has ruled in a New Jersey case that mandatory fees that nonmembers pay to be represented by a faculty union cannot be used for some types of lobbying. Story on Page 25.

The French government will propose wide-ranging reforms in the country's university system this month, and a political battle is expected. Story on Page 21.

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Copyright Office Asks Congress to Improve Law

Better balance sought for creators and users

By **STACY E. PALMER**

WASHINGTON

The U.S. Copyright Office last week asked Congress to press for a better balance "between the rights of creators and the needs of users of copyrighted works in libraries and archives."

The Copyright Act of 1976 provides a "workable structural framework" for such a balance, the office said in its first five-year assessment of the law's effectiveness in regulating photocopying activities in libraries.

But it warned that, without new legislation, continuing disputes between publishers and librarians over the meaning and application of portions of the act would have to be resolved in the courts.

A summary of the office's recommendations appears on Page 26.

In one key recommendation, the office supported an "umbrella statute" favored by the publishing industry that would allow users to copy protected works for a "reasonable" fee and otherwise excuse them from paying attorneys' fees or damages for copyright violations. The proposal is a major source of disagreement between pub-

Continued on Page 26, Column 1

Rash of Books Urge Disarmament as Scholars Join Nuclear Debate

By **ELLEN K. COUGHLIN**

"It's a small industry at the moment," says Richard Falk of the recent rash of new books by scholars on the disarmament side of the nuclear debate.

He should know; he's one of the laborers. Indeed, he and a number of other scholars—"separately and independently," in Mr. Falk's words—have begun to lend not only their voices but also their written words to the growing campaign to put an end to the nuclear-arms race.

Two prime examples of recently published works by such scholars are *Indefensible Weapons: The Political and Psychological Case Against Nuclearism* (Basic Books), by Robert Jay Lifton, a psychiatrist at Yale University's medical school, and Mr. Falk, a professor of international law at Princeton University; and *Beyond the Cold War: A New Approach to the Arms Race and Nuclear Annihilation* (Pantheon Books), by E. P. Thompson, the noted British social historian.

Although the two books approach the nuclear issue from different points of view, their authors share a common sense of the danger—and the absurdity—of the nuclear-arms buildup and a common disdain for fellow scholars who, through research on defense-related subjects, have contributed to the proliferation of nuclear arms.

The study by Dr. Lifton and Mr. Falk examines what they call "nuclearism"—the "psychological, political, and military dependence on nuclear weapons, the embrace of the weapons as a solution to a wide variety of human dilemmas, most ironically that of 'security' "—from the separate but, they

Continued on Page 27, Column 2

"Our proper enterprise as 'thinkers' is to mount a struggle against the nuclear menace."
—Richard Falk

Amid Controversy, U.S. Agriculture Department Seeks Improvements in Its Research System

CHRONICLE PHOTOGRAPH BY JOHN C. PHILLIPS

Orville G. Bentley: "I don't think the organizational system is wrong. What we have to do is to build a philosophy of broadening our horizons."

By **KIM McDONALD**

WASHINGTON

Even before he came here from Illinois, Orville G. Bentley knew his biggest challenge would be to find a way to improve the U.S. Department of Agriculture's research system.

Mr. Bentley, former dean of the agriculture school at the University of Illinois at Urbana-Champaign, was named the department's Assistant Secretary for science and education in September by President Reagan.

Waiting for him when he arrived here in October were a number of critical reports from Congress and the White House concluding that the department's research system had lost its focus and was badly in need of an overhaul despite notable past achievements.

The most biting of those reports was issued last fall by the White House Office of Science and Technology Policy. Based on the comments of 15 representatives of government, industry, and academe who attended a conference at Morrilton, Ark., the White House report criticized the Agriculture Department's research system for failing to provide adequate support for basic research that would help realize national goals. It also said the system's leadership had emphasized political rather than research needs, supported research of uneven quality, and isolated scientists at many of the 63 university-operated agricultural-experiment stations across the country from their scientific peers at universities and federal laboratories.

While some of the same complaints had

Continued on Page 12, Column 3

Finding a Home Away from Home

Campus housing officials and academic administrators often collaborate to help visiting faculty members and others find homes away from home for sabbaticals and vacations. Tapping contacts within higher education often is more fruitful than using travel or housing agencies to find such housing, an informal survey shows.

"Personal & Professional" section, Page 25.

FACT–FILE

616 Doctoral Programs in Biological Sciences Rated

Evaluations of 616 doctoral programs in six disciplines in the biological sciences have been published by the National Academy Press here as part of an assessment of the quality of graduate education in the United States.

Among the 16 measures in the assessment were 4 based on a survey of the reputations of the doctoral programs among faculty members. The respondents were asked to rate:

▶ The scholarly competence and achievements of faculty members in a stratified random sample of the departments in the respondents' field.

▶ The effectiveness of those departments in educating research scholars and scientists.

▶ The improvement of the program over the past five years.

▶ How familiar they were with the programs being rated.

The resulting raw scores were standardized on a scale where 50 represents the average score for all rated departments.

Copies of the report, *An Assessment of Research Doctorate Programs in the United States: Biological Sciences*, are available for $10.50 each from the National Academy Press, 2101 Constitution Avenue, N.W., Washington 20036.

Following are the standardized scores:

Biochemistry

	Faculty quality (a)	Effectiveness (b)	Improvement (c)	Familiarity (d)
U. of Alabama	49	51	68	46
Albany Medical C.	41	—	—	39
U. of Arizona	50	49	53	45
U. of Arkansas	37			39
Auburn U.	35	—	—	37
Baylor C. of Medicine	51	50	51	53
Boston U.				
Biochemistry	50	49	61	48
Medical & dental sciences	48	44	48	47
Brandeis U.	67	68	46	71
Brown U.	52	45	49	47
Bryn Mawr C.	40	42	—	41
City U. of New York				
Graduate School	51	51	46	44
U. of California				
Berkeley	71	72	47	71
Davis	61	63	57	65
Irvine	54	51	50	54
Los Angeles	66	63	58	67
Riverside	50	53	53	48
San Diego				
Biology	63	61	59	62
Chemistry	66	63	63	66
San Francisco	69	64	74	71
Santa Barbara*	54	46	41	54
Case Western Reserve U.	56	58	39	56
U. of Chicago	64	62	51	65
U. of Cincinnati	48	52	63	48
Colorado St. U.	44	44	51	45
U. of Colorado	53	48	65	53
Columbia U.	64	59	52	64
U. of Connecticut	50	47	40	50
Cornell U.	67	66	59	71
Cornell U. Medical Center	60	59	42	58
Dartmouth C.*	47	44	37	46
U. of Delaware	48	49	64	50
Duke U.	63	64	57	63
Emory U.	45	40	52	46
U. of Florida	46	50	59	47
George Washington U.	47	46	43	44
Georgetown U.	43	43	43	44
U. of Georgia	48	50	48	47
Harvard U.				
Graduate school	74	71	50	76
Medical school	69	67	45	68
U. of Hawaii	46	45	49	47
U. of Health Sciences–Chicago Medical School*	43	34	—	41
U. of Houston	43	—	—	38
Howard U.*	34	27	—	39
U. of Illinois				
Medical Center at Chicago	48	48	41	46
U. of Illinois				
Urbana-Champaign	62	64	54	63
Illinois Inst. of Tech.	39	39	—	38
Indiana U.–Purdue U.	49	51	41	44
Iowa St. U.	53	54	42	56
U. of Iowa	59	56	63	58
Johns Hopkins U.	58	61	49	56
Kansas St. U.	43	43	50	44
U. of Kansas				
Graduate school	44	48	46	42
U. of Kansas Medical Center	48	49	54	50
U. of Kentucky	46	43	41	48
Loma Linda U.	30	—	—	37
Louisiana St. U.	38	35	—	40
U. of Louisville	41	40	52	43
Loyola U. of Chicago	38	35	—	39
U. of Maryland				
Baltimore Prof. Schs.*	45	45	56	46
College Park*	42	—	—	39
Massachusetts Inst. of Tech.	74	74	57	74
U. of Massachusetts	48	49	54	47
Medical U. of South Carolina	43	45	—	41
U. of Miami	51	50	51	54
U. of Michigan	62	63	49	65
Michigan St. U.	57	58	53	56
U. of Minnesota	58	58	60	60
U. of Missouri	48	45	48	47
U. of Nebraska	40	43	52	42
U. of New Hampshire	32	—	—	37
U. of Medicine & Dentistry of New Jersey	39	38	—	40
New York U.	58	53	31	53
U. of North Carolina	56	56	65	57
North Carolina St. U.	45	43	43	45
U. of North Dakota	41	—	—	45
North Dakota St. U.	33	—	—	38
Northern Ill. U.	34	30	—	41
Northwestern U.	61	58	48	62
U. of Notre Dame	40	38	—	43
Ohio St. U.				
Physiological chemistry	46	44	34	43
Biochemistry	48	45	39	48
U. of Oklahoma	46	48	46	47
Oklahoma St. U.	47	48	41	44
U. of Oregon	57	58	48	53
Oregon St. U.	55	57	60	55
U. of Pennsylvania	65	60	50	68
Pennsylvania St. U.				
Graduate school	50	54	52	48
Hershey Medical Center	45	43	46	43
U. of Pittsburgh				
Arts & sciences*	52	51	45	49
Medical school	46	45	27	46
Princeton U.	59	57	25	59
Purdue U.	57	56	51	58
U. of Rhode Island	37	36	—	39
Rice U.	55	55	65	54
U. of Rochester	48	48	53	47
Rockefeller U.	71	66	44	72
Rutgers U.	56	54	57	50
St. U. of New York				
Albany	43	34	31	45
Buffalo, graduate	48	44	43	43
Buffalo, medical	48	48	55	46
C. of Environmental Science & Forestry*	30	29		38
Stony Brook*	54	55	63	56
Downstate Medical Center	43	36	32	43
Upstate Medical Center	43	39	—	41
Saint Louis U.	51	51	45	52
U. of South Dakota	36	34	—	40
U. of Southern California	54	51	49	54
Southern Ill. U.	30	37	52	41
Stanford U.	74	73	60	76
Syracuse U.*	41	42	36	44
Temple U.	53	51	48	52
U. of Tennessee	39	43	40	41
U. of Tennessee Center for the Health Sciences	49	48	50	43
Texas A&M U.	45	—	—	42
U. of Texas, Austin	54	55	37	53
U. of Texas Health Science Center, Houston	53	52	71	50
U. of Texas Health Science Center, San Antonio*	50	49	77	46
U. of Texas Medical Branch, Galveston*	43	33	—	41
Thomas Jefferson U.	37	—	—	38
Tulane U.	44	38	—	41
U. of Utah	52	51	37	47
Vanderbilt U.	56	56	52	57
U. of Vermont	41	37	57	44
Virginia Commonwealth U.	45	50	73	43
Virginia Poly. Inst. & St. U.	41	42	52	42
U. of Virginia	55	53	57	50
Wake Forest U.	41	35	43	43
U. of Washington	62	61	48	65
Washington St. U.*	50	52	63	48
Wayne St. U.	49	48	34	47
West Virginia U.				
Agricultural biochemistry	34	—	—	35
Medical biochemistry	43	43	49	42
U. of Wisconsin, Madison				
Biochemistry	71	70	46	74
Physiological chemistry	59	59	41	58
U. of Wyoming	35	35	—	41
Yale U.	70	68	63	70
Yeshiva U., Albert Einstein C. of Medicine	54	53	36	52

Botany

	Faculty quality (a)	Effectiveness (b)	Improvement (c)	Familiarity (d)
U. of Arizona	40	45	38	40
Auburn U.	41	42	54	46
Brigham Young U.	43	47	49	44
U. of California				
Berkeley				
Botany	65	65	34	66
Plant pathology	59	56	50	49
Plant physiology	64	60	44	57
Davis				
Botany	68	67	63	74
Plant pathology	66	66	52	48
Plant physiology	66	68	65	66
Irvine	50	50	44	49
Los Angeles	60	57	51	62
Riverside	61	61	58	54
U. of Chicago	45	48	37	46
Claremont Graduate School	55	47	27	52
Clemson U.				
Plant pathology	36	39	—	35
Plant physiology	29	27	—	32
U. of Colorado	42	46	63	40
Colorado St. U.	49	50	55	57
U. of Connecticut	45	47	55	49
Cornell U.	66	65	51	68
Duke U.	62	65	50	62
U. of Florida	51	52	58	62
U. of Georgia				
Botany	58	56	69	62
Plant pathology	50	52	65	44
U. of Hawaii*	49	48	59	48
U. of Illinois				
Botany	60	58	52	63
Plant pathology, physiology	60	61	62	62
Indiana U.	58	57	40	62
U. of Iowa	45	47	37	45
Iowa St. U.				
Botany	52	52	46	46
Plant pathology	50	51	38	45
U. of Kansas	46	49	48	46
Kansas St. U.	46	44	69	42
U. of Kentucky				
Biological sciences	36	31	—	39
Plant pathology	53	54	72	48
Plant physiology	45	45	55	41
Louisiana St. U.	36	38	46	40
U. of Maryland	47	48	53	52
U. of Massachusetts	54	50	43	56
Miami U. (Ohio)	51	50	55	49
U. of Michigan	64	65	43	62
Michigan St. U.	60	60	48	75
U. of Minnesota				
Agriculture, biology, & forestry	54	52	57	43
Botany	54	52	48	46
Plant pathology	55	60	49	50
U. of Missouri				
Biological sciences	39	39	36	41
Plant pathology*	48	47	46	45
U. of Montana	35	35	36	42
U. of Nebraska	51	51	62	57
U. of North Carolina	58	57	59	59
North Carolina St. U.				
Botany	47	52	52	45
Plant pathology	59	60	60	49
U. of North Dakota	20	17	—	31
North Dakota St. U.	33	30	—	35
Ohio St. U.				
Botany	53	54	64	63
Plant pathology	48	49	52	43
U. of Oklahoma	51	50	57	55
Oklahoma St. U.				
Botany	32	31	33	37
Plant sciences	43	48	55	37
U. of Oregon	43	43	39	45
Oregon St. U.	54	54	49	67
Pennsylvania St. U.				
Botany	[illegible]	41	38	41
Plant pathology	58	59	56	48
Purdue U.	54	54	35	55
U. of Rhode Island	41	42	47	41
Rutgers U.	50	50	52	50
St. U. of New York				
C. of Environmental Science & Forestry	51	51	41	37
Southern Ill. U.	41	38	37	43
U. of Tennessee	46	50	43	45
Texas A&M U.				
Biology	37	39	36	43
Plant pathology	40	42	50	43
Plant physiology	45	47	38	41
U. of Texas, Austin	68	67	60	69
Vanderbilt U.	35	37	38	42
Virginia Poly. Inst. & St. U.				
Biology	45	45	59	47
Plant pathology, physiology	43	40	56	45
U. of Washington	58	55	59	62
Washington St. U.	48	52	63	48
Washington U. (Mo.)*	56	53	66	55
U. of Wisconsin				
Madison				
Botany	60	60	38	66
Plant pathology	65	66	45	57
Milwaukee*	38	36	44	38
Yale U.	63	61	43	60

Cellular and Molecular Biology

	Faculty quality (a)	Effectiveness (b)	Improvement (c)	Familiarity (d)
U. of Arizona*	40	30	49	42
Atlanta U.				36
Baylor C. of Medicine*	57	56	62	59
Boston U.	46	38	36	43
Bowling Green St. U.	35	—	—	36
Brandeis U.	57	59	44	60
Brown U.	52	50	51	53
City U. of New York				
Graduate School	44	41	41	42
U. of California				
Berkeley	64	61	48	68
Irvine	53	51	51	55
Los Angeles	60	57	66	62
Riverside	47	42	44	42
San Diego	64	66	60	66
Santa Barbara	52	52	46	50
Case Western Reserve U.*	47	40	31	44
California Inst. of Tech.	70	72	47	71
U. of Chicago				
Biology	55	51	41	53
Biophysics & theoretical biology	58	59	42	51
Developmental biology*	54	47	33	57
Genetics	61	57	52	58

in New Assessment of Quality of Graduate Education

	Faculty quality (a)	Effectiveness (b)	Improvement (c)	Familiarity (d)
U. of Cincinnati	37	—	—	40
U. of Colorado	62	63	64	67
Columbia U.	63	62	59	65
U. of Connecticut	48	42	41	50
Cornell U. Medical Center	52	50	45	46
U. of Delaware	40	38	36	40
Duke U.*	58	57	61	57
Florida St. U.				
Biological science	48	51	51	43
Molecular biophysics*	48	47		45
Harvard U.	65	67	36	67
U. of Houston	34	—	—	39
U. of Illinois	52	48	49	48
Indiana U.*	56	53	55	58
Iowa St. U.	46	42	—	43
Johns Hopkins U.	54	53	32	57
U. of Kansas	39	32	36	41
Loma Linda U.	23	—	—	35
Marquette U.	38	—	—	37
Massachusetts Inst. of Tech.	70	74	56	72
U. of Michigan	54	46	49	54
Michigan St. U.	48	45	53	51
U. of Minnesota	49	45	39	47
U. of Missouri*	36	26	—	39
U. of Nebraska*	41	42	—	39
U. of North Carolina	54	54	67	55
U. of North Dakota	30	—	—	35
North Texas St. U.*	32	29	—	39
Northwestern U.	53	54	59	53
Ohio St. U.	41	40	44	42
U. of Oregon	58	56	46	60
U. of Pennsylvania	56	54	44	59
U. of Pittsburgh				
Arts & sciences*	49	49	57	49
Medical school	40	—	—	36
Princeton U.	53	53	32	58
Purdue U.	55	55	49	57
Rensselaer Poly. Inst.	35	—	—	36
Rice U.	47	42	41	42
U. of Rochester	51	51	57	50
Rockefeller U.	70	67	53	72
St. U. of New York				
Albany	48	40	61	47
Buffalo, graduate & professional ed.	47	42	—	44
Buffalo, Roswell Park	49	45	45	48
Stony Brook	50	47	58	50
Downstate Medical Center	45	42	64	43
U. of Southern California	49	44	51	43
U. of Southern Mississippi	21	—	—	34
Stanford U.*	61	60	67	58
Syracuse U.*	43	40	33	41
Texas Woman's U.*		—	—	36
U. of Texas				
Austin*	51	43	46	47
Dallas*	44	41	43	44
U. of Texas Health Science Center, Houston	48	43	54	49
Tufts U.				
Biology	36	—	—	38
Molecular biology	48	49	49	46
Tulane U.	44	—	—	40
U. of Utah				
Biology	56	52	74	54
Cellular, viral, & molecular biology	50	50	64	48
Vanderbilt U.	48	46	43	52
U. of Virginia	52	52	66	53
U. of Washington	61	64	48	55
Washington U. (Mo.)				
Molecular biology*	60	57	58	62
Cell biology	58	54	52	59
Wayne St. U.	40	—	—	40
U. of Wisconsin, Madison	67	66	58	67
Yale U.	69	70	59	72
Yeshiva U.				
Albert Einstein C. of Medicine				
Anatomy	49	36	62	49
Cell biology	56	53	42	56
Molecular biology	50	45	46	50

Microbiology

	Faculty quality (a)	Effectiveness (b)	Improvement (c)	Familiarity (d)
U. of Alabama	62	62	73	68
U. of Arizona	42	40	43	42
Auburn U.*	35	32	—	36
Veterinary school*	36	37	—	37
Baylor C. of Medicine	53	53	46	52
Boston U.	36	38	—	37
Brigham Young U.	40	36	—	40
U. of California				
Berkeley				
Bacteriology	55	56	35	50
Immunology	58	60	43	53
Microbiology	56	50	37	51
Parasitology*	—	—	—	37
Davis	64	65	54	64
Irvine*	58	55	64	57
U. of California—Continued				
Los Angeles	66	67	60	73
San Diego	68	67	61	69
San Francisco				
Immunology*	47	44	38	44
Microbiology	62	60	60	60
Case Western Reserve U.	47	47	27	50
Catholic University	25	—	—	37
U. of Chicago				
Immunology*	57	59	60	48
Microbiology	61	60	50	61
Virology	68	64	63	64
U. of Cincinnati	46	43	40	47
Colorado St. U.	44	48	43	44
Columbia U.	64	63	61	62
U. of Connecticut	51	50	47	53
Cornell U.	58	58	56	54
Cornell U. Medical center	60	57	52	56
Duke U.	67	67	59	70
Emory U.	49	46	73	49
U. of Florida	56	56	65	51
George Washington U.	44	44	39	42
Georgetown U.	47	43	36	46
U. of Georgia	50	51	53	55
Hahnemann Medical U.	42	42	51	46
U. of Hawaii	46	41	45	43
U. of Health Sciences–Chicago Medical School	35	—	—	37
U. of Idaho	34	35	48	38
U. of Illinois	65	67	52	65
U. of Illinois Medical Center at Chicago	52	54	45	52
Indiana U.	54	55	45	58
Indiana U.–Purdue U.	46	48	46	45
Indiana St. U.	34	—	—	37
U. of Iowa	52	57	55	54
Iowa St. U.	47	50	33	48
Johns Hopkins U.	68	67	52	70
U. of Kansas				
Graduate school	46	49	45	48
Medical school	41	41	43	39
Kansas St. U.	47	47	51	47
U. of Kentucky	41	40	36	48
Louisiana St. U.	43	41	49	44
Louisiana St. U. Medical Center	45	41	55	44
U. of Louisville	47	44	45	43
Loyola U. of Chicago	45	47	61	43
U. of Maryland				
Baltimore, dental	35	35	38	38
Baltimore, medical	41	40	36	44
College Park	52	53	44	52
Massachusetts Inst. of Tech.	77	77	59	83
U. of Massachusetts	55	53	48	52
Medical C. of Wisconsin	44	46	45	44
Medical U. of South Carolina*	47	48	67	51
Miami U. (Ohio)*	37	42	47	41
U. of Miami	44	45	45	44
U. of Michigan	62	65	64	67
Michigan St. U.	57	60	56	62
U. of Minnesota	60	62	51	63
U. of Mississippi	24	22	—	36
Mississippi St. U.	33	28	43	37
U. of Missouri	49	50	69	55
Montana St. U.	44	41	66	40
U. of Nebraska	41	45	45	42
U. of New Hampshire	41	41	50	44
U. of Medicine & Dentistry of New Jersey*	46	41	59	43
New York U.	65	60	50	61
U. of North Carolina	60	57	56	65
North Carolina St. U.	49	52	53	48
Northwestern U.	49	51	47	46
U. of Notre Dame	49	47	42	46
Ohio St. U.				
Microbiology	45	47	37	49
Medical microbiology & immunology*	47	45	45	49
Veterinary pathobiology	45	—	—	35
U. of Oklahoma				
Graduate school	38	40	41	42
U. of Oklahoma Health Science Center	42	47	51	39
Oklahoma St. U.	37	30	30	45
U. of Oregon	57	54	51	47
Oregon St. U.	50	52	49	48
U. of Pennsylvania				
Immunology*	67	64	63	61
Microbiology	64	62	56	66
Parasitology	—	—	—	35
Pennsylvania St. U.				
Graduate school	43	43	20	48
Medical center*	53	53	49	61
U. of Pittsburgh				
Arts & sciences*	54	53	54	49
Medical school	49	48	44	49
Public health	43	43	28	43
U. of Puerto Rico	—	—	—	34
Purdue U.	60	59	52	63
Rensselaer Polytech. Inst.	44	—	—	37
U. of Rhode Island	42	37	—	40
U. of Rochester	55	57	54	51
Rockefeller U.	75	72	51	76
Rutgers U.	62	63	52	70
St. U. of New York				
Buffalo, graduate	47	47	52	46
Buffalo, medical	53	53	50	52
Downstate Medical Center	46	43	47	40
Upstate Medical Center	40	44	—	39
Saint Louis U.	47	46	35	46
U. of Southern California	55	48	55	52
Southern Illinois U.	37	36	49	46
Stanford U.	64	61	58	62
Syracuse U.*	46	48	36	52
Temple U.	49	47	38	54
U. of Tennessee	47	52	55	52
U. of Tennessee Center for the Health Sciences	51	44	55	52
U. of Texas, Austin	56	57	52	57
U. of Texas Health Science Center, Houston	53	51	56	54
U. of Texas Health Science Center, San Antonio*	47	45	62	49
U. of Texas Medical Branch, Galveston*	48	47	70	44
Texas A&M U.	33	27	—	40
Thomas Jefferson U.	40	39	39	42
Tufts U.*	56	54	62	50
Tulane U.				
Microbiology & immunology	38	35	36	44
Parasitology	43	—	—	35
Vanderbilt U.	58	55	47	56
U. of Virginia	56	56	52	55
Virginia Commonwealth U.	50	52	63	48
Virginia Poly. Inst. & St. U.	54	57	64	50
Wake Forest U.	45	46	52	47
U. of Washington	69	66	61	70
Washington St. U.	44	46	—	40
Wayne St. U.	52	53	61	51
West Virginia U.	44	40	50	44
U. of Wisconsin	62	66	53	65
Yale U.	63	61	40	61
Yeshiva U., Albert Einstein C. of Medicine	60	55	52	54

Note: Ratings are standardized on a scale where 50 represents the average score for all rated departments.

(a) Rating of scholarly quality of faculty members in the program.

(b) Rating of the effectiveness of the program in education of research scholars or scientists.

(c) Rating of improvement in program quality in the last five years.

(d) Rating of the evaluators' familiarity with the work of program faculty.

* Program was initiated after 1970.

— Not available.

Physiology

	Faculty quality (a)	Effectiveness (b)	Improvement (c)	Familiarity (d)
U. of Alabama	55	54	71	53
Albany Medical C.	45	49	48	47
U. of Arizona				
Animal physiology	—	—	—	37
Medical school	53	53	61	54
Baylor C. of Medicine	49	43	39	48
Brown U.	54	51	48	52
U. of California				
Berkeley	55	56	39	61
Davis	60	62	66	62
Irvine	52	56	65	50
Los Angeles	67	63	49	73
San Diego				
Biology	47	49	—	42
Physiology-pharmacology*	59	53	64	56
San Francisco	70	67	59	77
Case Western Reserve U.	46	35	27	45
U. of Chicago	58	57	50	63
U. of Cincinnati	46	48	56	45
U. of Colorado	50	41	56	45
Colorado St. U.	52	56	60	45
Columbia U.	63	58	53	61
U. of Connecticut	43	36	46	42
Cornell U.	57	60	52	52
Cornell U. Medical Center	53	[illegible]	42	51
Duke U.	63	64	44	69
Emory U.	46	45	33	51
U. of Florida	48	48	52	56
Georgetown U.	48	48	43	46
U. of Georgia	36	—	—	40
Harvard U.	65	67	49	55
U. of Hawaii	44	41	—	41
U. of Houston	31	—	—	36
Howard U.	38	34	55	42
U. of Illinois	61	59	59	63
U. of Illinois Medical Center at Chicago	49	49	45	50
Indiana U.	44	44	33	45
Indiana U.–Purdue U.	56	52	43	59
Indiana St. U.	24	—	—	37
U. of Iowa	56	57	56	65
Iowa St. U.				
Animal science	43	40	—	40
Veterinary physiology	44	41	—	42
Johns Hopkins U.	56	53	30	53
U. of Kansas				
Graduate school	38	40	43	40
U. of Kansas Medical Center	47	44	53	48
Kansas St. U.	39	—	—	40
Kent St. U.	—	—	—	36
U. of Kentucky	44	43	43	45
Louisiana St. U.*	26	—	—	36
Louisiana St. U. Medical Center	49	49	68	54
U. of Louisville	36	30	—	42
Loyola U. of Chicago	45	43	41	48
U. of Maryland*	—	—	—	34
Medical C. of Wisconsin	40	37	54	45
Medical U. of South Carolina	40	38	—	43
U. of Miami	54	45	56	52
U. of Michigan	65	62	50	71
Michigan St. U.	57	59	56	62
U. of Minnesota				
Animal science	34	30	—	40
Medical school	60	56	50	56
Graduate school	57	53	48	57
U. of Missouri	58	60	48	54
U. of Medicine & Dentistry of New Jersey	44	42	49	41
New York U.	54	48	61	51
U. of North Carolina	61	57	61	62
North Carolina St. U.	45	45	—	41
U. of North Dakota	28	27	—	39
Northwestern U.	55	54	73	55

Continued on Following Page

FACT-FILE—Continued

Physiology

Continued from Preceding Page

	Faculty quality (a)	Effective-ness (b)	Improve-ment (c)	Famil-iarity (d)
Ohio St. U.				
Physiology	44	41	—	44
Veterinary physiology	35	—	—	39
U. of Oklahoma	40	38	45	46
Oklahoma St. U.				
Animal science	—	—	—	37
Physiological sciences	—	—	—	38
U. of Oregon	50	51	51	43
U. of Pennsylvania	67	66	54	77
Pennsylvania St. U.	57	58	57	54
Purdue U.	61	52	45	46
U. of Rochester	55	58	41	56
Rockefeller U.	68	70	52	62
Rutgers U.	51	53	48	52
St. U. of New York				
Buffalo, graduate	—	—	—	38
Buffalo, medical	60	61	43	62
Downstate Medical Center	46	45	31	48
Upstate Medical Center	47	48	—	45
U. of Southern California	52	50	56	48
Stanford U.	54	56	34	57
Temple U.	38	34	—	42
U. of Tennessee	47	42	48	50
U. of Texas Health Science Center, Houston	57	55	67	50
Thomas Jefferson U.	—	—	—	41
Tufts U.*	29	23	21	38
Tulane U.	43	39	46	41
Vanderbilt U.	56	54	43	48
U. of Vermont	49	50	51	48
U. of Virginia	60	61	51	[illegible]
Virginia Commonwealth U.	51	49	61	57
U. of Washington	68	69	54	74
Washington U. (Mo.)	63	63	59	61
Washington St. U.	40	46	43	44
Wayne St. U.	44	41	43	43
West Virginia U.	43	—	—	41
U. of Wisconsin	50	53	52	47
Yale U.	68	67	59	74
Yeshiva U. Albert Einstein C. of Medicine	58	53	46	56

Note: Ratings are standardized on a scale where 50 represents the average score for all rated departments.
(a) Rating of scholarly quality of faculty members in the program.
(b) Rating of the effectiveness of the program in education of research scholars or scientists.
(c) Rating of improvement in program quality in the last five years.
(d) Rating of the evaluators' familiarity with the work of program faculty.
* Program was initiated after 1970.
— Not available.

Zoology

	Faculty quality (a)	Effective-ness (b)	Improve-ment (c)	Famil-iarity (d)
U. of Arizona	55	57	56	57
Arizona St. U.	53	51	73	56
Auburn U.	38	44	45	35
Boston U.	48	47	35	49
U. of California				
Berkeley	70	69	42	71
Davis	58	58	54	62
Irvine	57	57	56	58
Los Angeles	67	67	51	69
U. of Chicago	62	62	35	59
Clemson U.	40	39	60	45
U. of Colorado	54	55	68	55
Colorado St. U.	50	52	66	53
U. of Connecticut	50	48	51	49
Cornell U.	61	59	42	56
Duke U.	67	67	56	67
U. of Florida	56	53	64	60
U. of Georgia	59	58	56	63
Harvard U.	74	72	44	73
U. of Hawaii	48	49	47	47
Howard U.*	36	35	—	35
Idaho St. U.	37	35	49	41
Indiana U.	56	57	26	53
U. of Iowa	57	55	63	57
Iowa St. U.	50	53	61	48
U. of Kentucky	44	41	45	40
U. of Louisville	36	35	33	37
Louisiana St. U.	36	39	47	41
U. of Maine	45	43	60	44
U. of Maryland	56	54	56	58
U. of Massachusetts	51	52	43	53
Miami U. (Ohio)*	43	44	44	45
Michigan St. U.	53	54	50	52
U. of Minnesota	61	56	42	49
Mississippi St. U.	35	32	39	37
U. of Nebraska	45	44	50	45
U. of New Hampshire	43	45	58	42
U. of North Carolina	58	57	58	59
North Carolina St. U.	47	48	49	44
U. of North Dakota	33	32	48	38
U. of Notre Dame	49	50	42	48
Ohio U.	37	37	39	42
Ohio St. U.	55	54	58	57
U. of Oklahoma	48	52	53	48
Oklahoma St. U.	39	40	44	42
U. of Oregon	55	54	42	55
Oregon St. U.	54	52	61	56
Pennsylvania St. U.	46	47	42	46
U. of Rhode Island	43	44	44	45
Rutgers U.				
Newark*	43	47	—	37
New Brunswick	50	54	50	46
St. U. of New York C. of Environmental Science & Forestry	50	52	48	37
U. of South Florida	41	42	52	44
Southern Illinois U. Carbondale	42	42	49	43
Stanford University	66	63	41	65
Syracuse U.*	50	47	35	50
U. of Tennessee	49	50	58	49
U. of Texas, Austin	65	64	53	65
Texas A&M U.	38	40	38	40
Texas Tech U.	46	44	63	43
Utah St. U.				
Biology	48	50	60	42
Range science	—	—	—	34
Vanderbilt U.	33	32	—	37
Virginia Poly. Inst. & St. U.	51	53	65	51
U. of Washington	69	70	69	73
Washington St. U.	51	52	55	49
Wayne St. U.	35	32	29	40
U. of Wisconsin				
Madison	66	65	44	65
Milwaukee	40	38	44	43
U. of Wyoming	40	42	60	40
Yale U.	69	69	49	66

SOURCE: CONFERENCE BOARD OF ASSOCIATED RESEARCH COUNCILS

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Students from Korea, Nigeria, Chile, Japan, the People's Republic of China, Australia, Switzerland, Ethiopia, India, the United Kingdom, and 30 other countries are represented at HGSE this year. One of the School's major strengths is its diversity. In addition to the 95 foreign students, a further 171 are American minorities. Almost two-thirds of the student body is female. With an average age of 33, most entering students have six years of professional experience in a variety of educational settings. Many have been teachers or college/university administrators. Others have experience in educational media, government, community social service agencies, health organizations, and the corporate sector.

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News Summary

Articles on inside pages

Auburn University's trustees, in an effort to allay concerns about President H. Hanly Funderburk, will hire a chancellor to handle day-to-day business on the university's main campus. Story on Page 3.

New regulations, effective in March, will give universities more leeway in managing grants from the National Science Foundation. Story on Page 15.

Average salaries for faculty members in social science and engineering rose more than 8 per cent this year, according to the latest Chronicle Survey. Story on Page 25.

College textbooks in business administration have sold better in recent years than texts in any other field. Story on Page 29.

More than 600 scholars in the U.S. received Fulbright awards to lecture or conduct research abroad. List of winners begins on Page 34.

The concept of tenure is facing challenges from government and university officials in Australia, Britain, and Canada. Story on Page 21.

BOB HARRIS, NFAA

Young artists and writers from around the country took part in an annual competition sponsored by the National Foundation for Advancement in the Arts. Story on Page 5.

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NCAA Votes Stiffer Academic Requirements for Participants in Intercollegiate Sports

PHOTOGRAPH FOR THE CHRONICLE BY KEN ROGERS, BLACK STAR

The question of standards has "unfortunately become a black-white issue," Edward B. Fort, above, chancellor of North Carolina A&T U., tells N.C.A.A. delegates.

Black-college presidents call action "patently racist'

By JOHN A. CROWL

SAN DIEGO

Under intense pressure from a group of college and university presidents, members of the top competitive division of the National Collegiate Athletic Association voted last week to tighten academic standards for students participating in intercollegiate sports.

The new rules were bitterly opposed by several black-college presidents, who charged that the proposals were "patently racist" and aimed at reducing the number of blacks on teams of institutions with major sports programs. Both charges were denied by supporters of the new rules.

The new regulations, approved at the association's annual meeting here, provide that to be eligible to play at an N.C.A.A. Division I institution:

▶ An entering student must have a 2.0 (c) grade-point average in 11 academic high-school courses, including at least three courses in English, two in mathematics, two in social science, and two in natural or physical science. In addition, the student must score at least a combined 700 on the Scholastic Aptitude Test or 15 on the American College Testing Program's examination.

▶ A student already in college must be making "satisfactory progress" in a program leading to a bachelor's degree.

An entering student who has an overall 2.0 high-school average but who fails to

Continued on Page 20, Column 1

In other actions, the National Collegiate Athletic Association's annual convention:

- Voted to seek an anti-trust exemption for its TV contracts.
- Rejected a proposal to demote as many as 40 institutions from its top division.
- Barred alumni and boosters from recruiting athletes.
- Decided to begin investigating abuses in women's sports on August 1.

Stories begin on Page 17 and summaries of all actions appear on Pages 18 and 19.

Lower Pension Benefits for Women Violate Civil Rights, U.S. Says

Backs female professor in TIAA-Long Island U. case

By CHERYL M. FIELDS

WASHINGTON

The Reagan Administration last week sided with female faculty members who contend that pension plans that pay lower monthly retirement benefits to women than to men violate federal civil-rights laws.

The Justice Department, in a brief filed in the Supreme Court, said such pension plans violated Title VII of the Civil Rights Act of 1964, which bars job discrimination.

The purpose of Title VII, the Justice Department said, is to protect the individual employee. "It is simply irrelevant for Title VII purposes that women as a group receive total annuity benefits equal to men as a group. The violation consists of the payment to each individual woman of smaller monthly benefits than are paid to a similarly situated man."

Long Island U. Case

The department noted that Title VII's emphasis on the individual was upheld by the Court last year in another case, *Connecticut* v. *Teal*. The justices ruled that bias against an individual "cannot be justified by reliance on the treatment of other members of the victim's class, either individually or as a group."

Plans that pay women unequal monthly benefits do so on the ground that women, on the average, live longer than men and thus must receive less per month after retirement because they will collect benefits longer.

The Justice Department's brief was filed in a case that is being appealed to the Supreme Court by Long Island University and the Teachers Insurance and Annuity Association and the College Retirement Equities Fund. The Court has not decided whether it will consider the case.

The U.S. Court of Appeals for the Second Circuit ruled last year in favor of a faculty member at Long Island, Diana L. Spirt, who claimed that the pension plans offered by the university through T.I.A.A.-C.R.E.F. illegally discriminated against women by paying them lower monthly benefits after they retire.

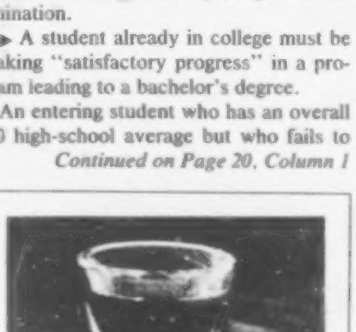
At least half a dozen challenges to the plans have been filed against universities and the insurance companies by female faculty members.

Spokesmen for the American Association of University Professors and women's groups said they were pleased and relieved

Continued on Page 26, Column 4

Student Drinking and Alcohol Abuse

Many college officials have expressed alarm over what they perceive to be a dramatic rise in drinking and alcohol abuse by students. However, a new study indicates that the proportion of students who drink alcoholic beverages has not changed over the last eight years.



Details of the study appear on Page 9.

Graduate Schools Report Drop in Enrollment

Enrollment of first-time graduate students declined by 4.5 per cent last fall, according to the annual survey by the Graduate Record Examinations Board and the Council of Graduate Schools in the United States.

The decline in the number of new graduate students was particularly large at institutions that offer no graduate degree beyond the master's.

Those institutions reported nearly 11 per cent fewer new graduate students than they had a year ago. Universities granting the Ph.D. degree reported 3.5 per cent fewer.

Total graduate enrollment was down 1.1 per cent in the fall of 1982, following a decline of equal size the previous year.

Applications for admission to graduate schools increased by 1 per cent at universities granting Ph.D. degrees but declined by 1.6 per cent at institutions offering only the master's degree.

The graduate schools participating in the survey awarded 136,401 master's degrees in 1981-82, 1 per cent fewer than in 1980-81. They granted 21,242 Ph.D. degrees, a one-year decrease of 0.3 per cent.

For the average graduate assistant working 20 hours a week, this year's stipends are up 7.4 per cent in chemistry departments, 6.2 per cent in economics departments, and 6.5 per cent in English departments, compared with last year's averages. Data on graduate assistants' stipends were not reported for other departments.

The report on graduate-school enrollment was based on information from 263 of the 370 institutions that are members of the Council of Graduate Schools.

FACT-FILE

Enrollment, Stipends, and Degrees at 263 Graduate Schools

	Public institutions		Private institutions		All institutions	
	Fall 1982	1-year change	Fall 1982	1-year change	Fall 1982	1-year change
Total graduate-school enrollment						
Master's-degree-only institutions	76,825	– 4.2%	9,588	– 1.8%	86,413	– 4.0%
Ph.D.-granting institutions	374,196	– 0.1%	123,029	– 2.2%	497,225	– 0.6%
All institutions	451,021	– 0.8%	132,617	– 2.2%	583,638	– 1.1%
First-time graduate students						
Master's-degree-only institutions	14,338	–10.9%	2,574	–10.7%	16,912	–10.9%
Ph.D.-granting institutions	90,385	– 3.2%	32,316	– 4.4%	122,701	– 3.5%
All institutions	104,723	– 4.3%	34,890	– 4.9%	139,613	– 4.5%
Applications received						
Master's-degree-only institutions	31,250	– 0.7%	4,931	– 6.9%	36,181	– 1.6%
Ph.D.-granting institutions	285,192	– 0.6%	130,756	– 1.0%	415,948	– 0.1%
All institutions	316,442	+ 0.5%	135,687	– 1.2%	452,129	0.0%
Graduate assistants, services required						
Master's-degree-only institutions	4,065	+ 4.5%	364	+ 3.7%	4,429	+ 4.4%
Ph.D.-granting institutions	86,334	+ 1.2%	20,086	+ 0.9%	106,420	+ 1.1%
All institutions	90,399	+ 1.3%	20,450	+ 0.9%	110,849	+ 1.3%
Graduate fellows, no services required						
All institutions	13,812	– 1.1%	8,991	+ 0.7%	22,803	0.4%
Average stipends for teaching assistants						
Chemistry departments						
Master's-degree-only institutions	$ 4,191	+ 1.2%	$ 3,137	+ 3.5%	$ 3,169	+ 1.2%
Ph.D.-granting institutions	5,213	+ 7.8%	5,165	+11.0%	5,199	+ 8.7%
All institutions	4,843	+ 6.2%	4,940	+10.4%	4,868	+ 7.4%
Economics departments						
Master's-degree-only institutions	$ 3,445	+ 3.8%	$ 2,550	+ 2.0%	$ 3,340	+ 3.7%
Ph.D.-granting institutions	4,707	+ 7.1%	4,256	+ 6.0%	4,576	+ 7.0%
All institutions	4,366	+ 6.4%	3,964	+ 5.7%	4,264	+ 6.2%
English departments						
Master's-degree-only institutions	$ 3,537	+ 2.8%	$ 2,940	+ 7.1%	$ 3,443	+ 3.2%
Ph.D.-granting institutions	4,601	+ 7.0%	4,070	+ 9.2%	4,464	+ 7.5%
All institutions	4,300	+ 6.0%	3,873	+ 8.9%	4,201	+ 6.5%
Degrees awarded in 1981-82						
Master's	102,137	– 1.5%	34,264	+ 0.8%	136,401	– 1.0%
Ph.D.	15,260	+ 0.2%	5,982	– 1.5%	21,242	– 0.3%

Note: Data are based on reports of 263 institutions, or 71 per cent of the 370 institutions that are members of the Council of Graduate Schools. Data for stipends are for first-time teaching assistants working 20 hours per week for 9 or 10 months. Because of varying practices among institutions, the data for average stipends may be less reliable than the percentage change in average stipends.

SOURCE: COUNCIL OF GRADUATE SCHOOLS IN THE UNITED STATES AND GRADUATE RECORD EXAMINATIONS BOARD

Colleges Set Up Policies to Curb Misuse of Alcohol

Colleges and universities are becoming increasingly aware of alcohol-related problems on their campuses, and a significant number are establishing or expanding policies and programs aimed at curbing those problems, according to a national survey.

The survey, conducted last February, examined student drinking and related issues from four perspectives: institutional policy, drinking behavior, education and prevention, and counseling and treatment. The results were compared with findings from a nearly identical study in 1979.

Both were conducted by Angelo F. Gadaleto, director of the counseling center at Radford University, and David S. Anderson, alcohol-education coordinator at Virginia Polytechnic Institute and State University. They mailed questionnaires to a representative sample of 330 colleges and universities nationwide that offer at least the bachelor's degree. Of those, 236 responded, compared with 165 in 1979.

The findings indicate that not only are college officials more sensitive now to the role drinking plays in various kinds of student problems; they are more willing than before to establish and enforce policies that promote, in Mr. Gadaleto's words, "an environment conducive to the proper use, versus abuse, of alcohol."

Among the findings:

▶ Of the 236 college officials responding to the 1982 survey, 42 per cent believed that there had been an increase in alcohol-related problems on their campuses over the last few years.

▶ Nearly three-fourths of the respondents said alcohol was involved in at least 40 per cent of the instances of damage to residence halls. Fifty-eight per cent said alcohol was involved in at least 40 per cent of the incidents of violent behavior, and 37 per cent said it was involved at least 40 per cent of the time when students have academic difficulties.

▶ Seventy-seven per cent of the colleges that responded do not allow alcohol to be advertised as the primary focus of a party, and 74 per cent require that nonalcoholic drinks be offered at public functions where alcoholic drinks are available; 46 per cent also require that food be served at such events. Those figures reflect a growing tendency among officials to set guidelines for social events in an effort not only to reduce abusive drinking behavior, but also to encourage positive behavior, according to Mr. Gadaleto.

▶ The number of colleges with alcohol-education programs increased from 69 per cent in 1979 to 79 per cent in 1982. Thirty-six per cent have an alcohol-education specialist on the staff, up from 14 per cent in 1979. And 58 per cent of the colleges have established committees to focus on alcohol education and prevention of abuse, up from 37 per cent in 1979. However, only 28 per cent of the respondents said they budgeted funds (other than for personnel) specifically for alcohol-education programs.

▶ Twenty-eight per cent of the colleges surveyed have established programs to help employees who have drinking problems.

▶ Forty-five per cent have used an outside consultant for help with alcohol-education efforts.

—ZOÉ INGALLS

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Although Drinking Is Widespread, Student Abuse of Alcohol Is Not Rising, New Study Finds

Such problems as violent behavior and vandalism have remained the same or decreased over an 8-year period

By ZOË INGALLS

The proportion of students who drink alcoholic beverages has not changed over the last eight years, and the proportion who are heavy drinkers has risen only slightly, a recent survey found.

And, with a few exceptions, the incidence of problems related to the abuse of alcohol, such as violent behavior and vandalism, has remained the same or decreased over the eight-year period.

The findings run contrary to the views of many college officials, who have voiced alarm over what they perceive as a dramatic rise in student drinking and alcohol abuse. However, the findings reinforce what many experts have said all along—that alcohol abuse is not on the rise, but campus officials' awareness of the problem is.

82 Pct. Are Drinkers

The study, "The Drinking Patterns and Drinking Problems of College Students: 1983," was conducted last fall by Ruth C. Engs, associate professor of health and safety education at Indiana University, and David J. Hanson, associate professor of sociology at the State University of New York College at Potsdam. Preliminary results were released to *The Chronicle* last week.

The researchers sent questionnaires to faculty members teaching sociology and health-survey classes at 219 colleges and universities in all 50 states. The faculty members were asked to distribute them to students representing a cross-section of grade levels and majors. Responses were received from 5,030 students at 93 institutions.

According to experts in the field who were interviewed by telephone last week, Ms. Engs's and Mr. Hanson's study is the first national survey of college students of this scope to be conducted in at least a decade.

They found that 82.1 per cent of the students surveyed drink—86.4 per cent of the men and 79.4 per cent of the women. Nearly 21 per cent identified themselves as heavy drinkers, consuming six or more drinks at a sitting at least once a week.

From among the 5,030 respondents, the researchers isolated a smaller sample of 854 students at 13 colleges of different sizes and types in different regions of the country. To point up any changes over time, that sub-sample was then compared with a group of 1,128 students at the same or equivalent colleges surveyed by Ms. Engs in 1974. (The results of that survey were published in 1977.)

Increase in Heavy Drinkers

The proportion of students who said they were drinkers in 1974 and in 1982 was the same: 79.4 per cent. That finding is generally consistent with the results of other studies—mostly regional—conducted over the last few years. For example, a 1978 study of 34 New England colleges by Henry Wechsler of the Medical Foundation of Boston, a health-research group, found that 95 per cent of the students were drinkers. A follow-up study of 16 of those colleges in 1981 came up with similar results: 91 per cent were drinkers.

In comparing the 1974 and 1982 samples, Ms. Engs and Mr. Hanson found a modest increase in the proportion of heavy drinkers—from 11.6 per cent in 1974 to 17.2 per cent in 1982. The latter figure is close to Mr. Wechsler's 1981 finding that 16 per cent of students were heavy drinkers.

The proportion of women who identify themselves as heavy drinkers jumped from 4.4 per cent in 1974 to 11.4 per cent in 1982. Among white women the proportion tripled, rising from 4.8 to 14.4 per cent. Ms. Engs says she believes that the increase may be attributed in part to greater willingness on the part of women to admit that they are heavy drinkers, "because society's attitudes are more permissive." Nevertheless, she says, "there may very well be heavier drinking as women are becoming more liberated and are adopting more male patterns of drinking behavior."

Significant changes occurred in only three areas of alcohol-related problem behavior, according to the study: an increase in the percentage of students reporting hangovers, missing classes because of hangovers, and drinking while driving. But it found no significant change in the incidence of other behavioral problems that many college officials had reported to be on the rise, such as fighting after drinking, damaging university property, missing classes, and having trouble with the law or with the college administration.

"I think this shows what many of us have been saying all along—that school administrations are just becoming more aware of such problems," Ms. Engs says.

Sample Could Be Biased

While acknowledging the importance of a large national study of this type, experts reached last week by *The Chronicle* cautioned that the results must be considered in context. They pointed out that getting a truly representative sample of college students for such a study is extremely difficult. They also said that students in sociology and health classes might be more attuned to or interested in alcohol problems than their counterparts in other fields.

The results of the study, in the words of one expert, "may represent what these 5,000 students are like, but may or may not be different from what the 12 million or so college students in this country are like."

In addition, Ms. Engs says she would have been happier with a higher response rate, but that she feels she and Mr. Hanson were successful in achieving a "stratified" sample that is representative of today's college students in everything from sex, race, and grade level to the type and location of institutions they attend.

Among their other findings:

▶ The lower a student's grade-point average, the more likely he or she is to be a heavy drinker.

▶ Students who are religious are less likely to drink, or to drink heavily, than those who are not.

▶ Fewer blacks than whites drink.

▶ Fewer women than men drink.

▶ There is virtually no difference in drinking patterns among students at large and small institutions.

▶ The smaller the community in which a college is located, the heavier the drinking. At colleges in communities of 100,000 or fewer, 23.5 per cent of students reported that they were heavy drinkers, compared with only 13.1 per cent in communities of over 500,000.

Alcohol on College Campuses: Patterns and Problems

Characteristics of students, 1982 survey	Drinkers†	Heavy drinkers‡
All students	82.1%	20.6%
Males	86.4%	32.3%
Females	79.4%	12.7%
Whites	85.4%	22.7%
Blacks	58.3%	3.8%
Freshmen	80.6%	23.1%
Sophomores	83.0%	22.0%
Juniors	81.8%	19.1%
Seniors	84.0%	17.3%
Roman Catholics	90.2%	24.5%
Protestants		
Denominations that allow drinking	87.3%	23.6%
Denominations that do not allow drinking	58.7%	10.7%
Jews	90.5%	12.3%
Other religion or none	82.9%	20.1%
Religion very important	78.3%	17.4%
Religion not very important	92.5%	29.2%
Grade-point average		
4.0	68.9%	10.7%
3.5	78.0%	11.4%
3.0	83.6%	20.7%
2.5	84.6%	23.8%
2.0	80.8%	27.3%
Less than 2.0	84.8%	38.0%

Characteristics of institutions attended		
Public	82.1%	20.6%
Private	82.5%	20.7%
Church-related		
Roman Catholic	90.4%	24.7%
Protestant	78.7%	22.6%
Predominantly black	64.9%	7.4%
Other	82.6%	20.8%
Northeast	83.2%	22.7%
Midwest	79.8%	24.1%
South	60.8%	15.9%
West	82.4%	19.9%
Enrollment		
More than 10,000	83.0%	19.8%
Less than 10,000	81.0%	21.7%
Population of community		
Less than 100,000	83.5%	23.5%
100,000 to 500,000	77.5%	16.0%
More than 500,000	84.0%	13.1%

Students who drink †	1974	1982
All students	79.4%	79.4%
Males	83.5%	81.9%
Black	71.6%	66.4%
White	84.2%	87.7%
Females	76.1%	77.4%
Black	49.1%	50.9%
White	82.4%	86.1%
Freshmen	79.2%	76.9%
Sophomores	74.9%	78.7%
Juniors	80.9%	79.3%
Seniors	84.4%	83.6%

Students who are heavy drinkers ‡		
All students	11.6%	17.2%
Males	20.3%	25.0%
Black	6.2%	10.1%
White	22.2%	30.8%
Females	4.4%	11.4%
Black	3.6%	1.8%
White	4.8%	14.4%
Freshmen	12.1%	19.2%
Sophomores	12.4%	17.3%
Juniors	11.0%	15.9%
Seniors	12.1%	17.2%

Alcohol-related problems of students who drink ††		
Hangover	57.6%	66.3%
Nausea and vomiting	37.8%	37.0%
Know they have a problem with alcohol	8.5%	7.4%
Driving after drinking	51.0%	47.5%
Driving after much drinking	30.8%	30.4%
Driving while drinking	25.7%	45.4%
Arrested for drunk driving	1.8%	0.5%
Missed class because of hangover	16.8%	18.4%
Went to class after drinking	10.9%	7.6%
Missed class after drinking	10.6%	8.1%
Received lower grade	4.1%	4.1%
Criticized by date	10.0%	10.0%
Fought after drinking	9.1%	9.2%
Damaged university property	8.8%	7.8%
Had problems with law	3.5%	2.5%
Trouble with college administration	1.8%	1.4%
Lost job because of drinking	0.6%	0.4%

† Students who said they drank alcoholic beverages at least once in the past year.
‡ Students who have six or more drinks at any one sitting, more than once a week.
†† Percentage of students who drink who had alcohol-related problems at least once in the past year.

Note: Comparative data for 1974 and 1982 are based on a sample of 1,128 students questioned in 1974 and 854 students at the same or equivalent colleges asked the same questions in 1982. Other data were collected in the fall of 1982 from a sample of 5,030 students at 93 colleges and universities in all 50 states.

SOURCE: "DRINKING PATTERNS AND DRINKING PROBLEMS OF COLLEGE STUDENTS: 1983"
BY RUTH C. ENGS AND DAVID J. HANSON

FACT-FILE

Final Report in Assessment of Graduate Education

WASHINGTON

Evaluations of 639 doctoral programs in seven fields in the social and behavioral sciences have been published by the National Academy Press here in the last of five reports on a national assessment of the quality of graduate education in the United States.

Earlier reports covered mathematics and the physical sciences (*The Chronicle*, September 29, 1982), the humanities (November 10, 1982), engineering (December 1, 1982), and the biological sciences (January 12).

The assessment was conducted by a committee named by the Conference Board of Associated Research Councils, which comprises the American Council of Learned Societies, the American Council on Education, the National Research Council, and the Social Science Research Council.

The fields rated in the social and behavioral sciences were anthropology, economics, geography, history, political science, psychology, and sociology.

The committee's report on those fields included 16 measures that it said were "related to quality." They ranged from the size of the faculty in each program to the total expenditure reported by universities for research and development in each of the seven fields.

Sensitive to criticism of previous assessments of education quality, the committee did not develop a combined rating of the doctoral programs. The report said the committee was "convinced that no single measure adequately reflects the quality of a research-doctorate program and wishes to emphasize the importance of viewing individual programs from the perspective of multiple indices or dimensions."

Also among the 16 measures were 4 based on a survey of the reputations of the doctoral programs among faculty members in those fields.

In that survey they were asked to rate:

- ▶ The scholarly competence and achievements of faculty members in a stratified random sample of the departments in their field.
- ▶ The effectiveness of those departments in educating research scholars and scientists.
- ▶ The improvement of the program over the past five years.
- ▶ How familiar they were with each program being rated.

The results were presented in both raw scores and standardized scores converted from raw scores with a mean of 50 and a standard deviation of 10. About two-thirds of all programs rated had standardized scores of between 40 and 60, and 95 per cent had standardized scores of between 30 and 70.

Copies of the report, *An Assessment of Research Doctorate Programs in the United States: Social and Behavioral Sciences*, are available for $10.50 each from the National Academy Press, 2101 Constitution Avenue, N.W., Washington 20036.

Following are the standardized scores for the ratings in the seven fields:

Anthropology

	Faculty quality (a)	Effective-ness (b)	Improve-ment (c)	Famil-iarity (d)
American U.	32	29	44	27
U. of Arizona	66	66	57	66
Arizona St. U.	48	52	61	45
Boston U.*	42	40	37	45
Brandeis U.	49	47	43	47
Brown U.	44	45	45	45
Bryn Mawr U.	45	49	56	47
U. of California				
Berkeley	74	69	47	73
Davis	46	50	60	41
Irvine	53	52	66	50
Los Angeles	63	63	55	62
Riverside	44	47	42	43
San Diego*	57	57	60	54
Santa Barbara	60	56	63	58
Catholic U.	33	32	42	36
U. of Chicago	73	70	42	72
City U. of New York				
Graduate School	62	56	60	58
U. of Colorado	47	49	36	47
Columbia U.	60	56	22	62
U. of Connecticut	48	46	52	48
Cornell U.	57	60	43	56
Duke U.	53	54	63	52
U. of Florida	57	53	80	54
U. of Georgia*	27	25	42	37
Harvard U.	63	61	31	70
U. of Hawaii	51	54	51	44
U. of Illinois	60	57	51	58
Indiana U.	50	55	47	48
U. of Kansas	44	44	48	43
U. of Kentucky	41	40	49	40
U. of Massachusetts	54	58	63	53
U. of Michigan	73	74	52	71
Michigan St. U.	48	51	48	46
U. of Minnesota	46	44	37	42
U. of Missouri	43	45	37	42
U. of New Mexico	61	59	64	59
New Sch. for Social Research*	41	35	45	48
New York U.	47	47	36	51
U. of North Carolina	51	53	47	49
Northwestern U.	61	61	63	65
Ohio St. U.	40	45	54	40
U. of Oklahoma	32	32	48	33
U. of Oregon	44	47	42	41
U. of Pennsylvania	67	66	53	66
Pennsylvania St. U.	53	55	48	53
U. of Pittsburgh	53	54	45	57
Princeton U.	47	46	44	52
Rice U.	39	33	38	44
U. of Rochester	41	46	45	41
Rutgers U.	56	51	60	59
St. U. of New York				
Albany*	41	37	55	44
Binghamton	48	51	61	50
Buffalo	51	51	55	54
Stony Brook	45	42	46	46
Southern Illinois U.	41	43	52	41
Southern Methodist U.	45	46	56	42
Stanford U.	63	66	45	65
Syracuse U.	38	36	42	37
U. of Tennessee*	36	40	56	37
U. of Texas, Austin	59	61	62	57
Tulane U.	47	48	40	49
U. of Utah	42	43	53	42
U. of Virginia*	53	49	71	54
Washington U. (Mo.)	45	47	48	53
U. of Washington	56	58	57	55
Washington St. U.*	43	45	61	37
Wayne St. U.	41	37	48	38
U. of Wisconsin				
Madison	53	56	41	53
Milwaukee*	44	43	41	45
Yale U.	65	63	45	64

Economics

	Faculty quality (a)	Effective-ness (b)	Improve-ment (c)	Famil-iarity (d)
American U.	42	40	49	42
U. of Arkansas	36	33	—	36
Boston C.	46	47	51	48
Boston U.	50	50	63	49
Brown U.	59	60	44	63
U. of California				
Berkeley	65	65	22	65
Davis				
Agricultural economics	53	59	48	39
Economics	51	50	51	49
Los Angeles	65	62	60	68
Riverside	40	37	28	42
San Diego	58	57	71	56
Santa Barbara	49	49	61	50
California Inst. of Tech.*	56	59	64	55
Carnegie-Mellon	57	62	37	55
Case Western Reserve U.	35	35	35	36
U. of Chicago	72	72	44	70
U. of Cincinnati	39	38	44	37
City U. of New York				
Graduate School	44	43	43	43
Claremont Graduate School	48	49	48	45
Clark U.	36	36	41	38
U. of Colorado	44	46	42	43
Colorado St. U.	41	40	49	38
Columbia U.	66	62	59	65
U. of Connecticut	43	42	53	42
Cornell U.	57	57	56	59
Duke U.	56	58	60	58
U. of Florida	49	47	67	51
Florida St. U.	43	45	45	42
Fordham U.	35	35	49	37
George Washington U.	45	45	49	47
Georgetown U.	39	40	44	38
Georgia St. U.	41	40	48	40
Harvard U.	72	67	45	70
U. of Hawaii*	39	39	44	37
U. of Illinois	54	54	42	55
Indiana U.	46	48	38	46
U. of Iowa	48	50	65	50
Iowa St. U.	51	57	40	47
Johns Hopkins U.	57	59	31	60
U. of Kansas	42	42	38	42
U. of Kentucky	44	41	46	43
U. of Maryland	58	54	65	60
U. of Massachusetts	50	48	41	54
Massachusetts Inst. of Tech.	73	74	52	70
U. of Michigan	63	63	51	64
Michigan St. U.	55	56	55	54
U. of Minnesota	68	68	61	65
U. of Missouri	42	42	42	41
U. of Nebraska	40	40	46	38
New Sch. for Social Research	42	41	41	49
New York U.	60	54	68	61
U. of North Carolina	54	56	50	56
North Carolina St. U.	47	50	43	43
Northern Illinois U.	36	34	35	36
Northwestern U.	65	64	64	67
U. of Notre Dame	38	39	41	41
Ohio St. U.	50	51	46	52
U. of Oklahoma	38	38	46	38
Oklahoma St. U.				
Agricultural economics	42	42	—	36
Economics & finance	43	44	47	43
U. of Oregon	45	48	49	43
U. of Pennsylvania	67	64	61	67
Pennsylvania St. U.	47	47	48	45
U. of Pittsburgh	48	50	49	49
Princeton U.	71	70	67	68
Purdue U.	51	54	37	50
Rice U.	45	47	36	46
U. of Rochester	64	65	49	64
Rutgers U.	46	44	50	47
St. U. of New York				
Albany	40	41	54	41
Binghamton	44	44	46	44
Stony Brook	50	50	63	52
U. of South Carolina	42	39	63	40
U. of Southern California	54	51	76	54
Southern Illinois U.	35	34	43	39
Southern Methodist U.	46	47	50	46
Stanford U.	72	70	69	68
Syracuse U.	45	49	49	46
U. of Texas, Austin	49	48	48	50
Texas A&M U.	52	53	56	52
Tulane U.	45	45	58	48
U. of Utah	42	42	51	40
Vanderbilt U.	51	51	45	51
U. of Virginia	56	56	59	57
Virginia Poly. Inst. & St. U.	55	55	55	59
Washington U. (Mo.)	53	54	44	55
U. of Washington	55	57	56	56
Washington St. U.	39	38	58	38
Wayne St. U.	46	47	49	49
West Virginia U.	39	41	47	40
U. of Wisconsin				
Madison	65	66	63	67
Milwaukee	43	41	53	44
Yale U.	71	68	43	69

Geography

	Faculty quality (a)	Effective-ness (b)	Improve-ment (c)	Famil-iarity (d)
U. of Arizona*	46	44	53	46
Boston U.	48	46	64	48
U. of California				
Berkeley	66	67	50	64
Davis	45	43	54	42
Los Angeles	64	63	61	64
Riverside	36	38	39	39
U. of Chicago	67	64	32	67
U. of Cincinnati	43	45	44	47
Clark U.	62	62	52	63
U. of Colorado	53	54	61	51
Columbia U.	42	42	39	43
U. of Denver	32	35	51	35
U. of Florida	41	42	44	38
U. of Georgia	55	55	58	53
U. of Hawaii	52	54	58	46
U. of Illinois	58	59	68	61
Indiana U.	37	36	51	35
U. of Iowa	57	60	39	55
Johns Hopkins U.	59	56	46	56
U. of Kansas	56	58	53	53
Kent St. U.	37	37	46	38
U. of Kentucky*	42	40	61	47
Louisiana St. U.	55	57	50	45
U. of Maryland	45	45	53	47
U. of Michigan	52	51	22	63
Michigan St. U.	51	52	47	51
U. of Minnesota	71	70	59	69
U. of Nebraska	49	51	62	47
U. of North Carolina	49	50	54	47
U. of Northern Colorado*	28	30	47	25
Northwestern U.	48	41	25	59
Ohio St. U.	63	66	43	63
U. of Oklahoma	45	45	50	48
U. of Oregon	45	45	44	44
Oregon St. U.	42	45	51	40
Pennsylvania St. U.	68	66	57	66
U. of Pittsburgh	35	36	33	39
Rutgers U.	51	49	58	50
St. U. of New York, Buffalo*	55	52	70	54
Southern Illinois U.	40	38	38	40
Syracuse U.	59	59	53	60
U. of Tennessee	44	45	58	45
U. of Texas, Austin	48	44	40	49
Texas A&M U.	44	41	53	46
U. of Utah	38	37	49	34
U. of Washington	59	62	48	60
U. of Wisconsin				
Madison	66	68	47	65
Milwaukee	53	53	56	53

History

	Faculty quality (a)	Effective-ness (b)	Improve-ment (c)	Famil-iarity (d)
American U.	40	39	43	42
U. of Arizona	49	50	81	49
U. of Arkansas*	38	38	52	40

Rates 639 Programs in Social, Behavioral Sciences

	Faculty quality (a)	Effectiveness (b)	Improvement (c)	Familiarity (d)
Auburn U.	36	33	51	35
Boston C.	38	38	46	38
Boston U.	52	50	53	48
Brandeis U.	61	60	54	60
Brown U.	62	63	66	56
Bryn Mawr C.	49	52	50	44
U. of California				
Berkeley	71	69	49	70
Davis	53	54	61	53
Irvine	44	42	57	47
Los Angeles	64	62	53	65
Riverside	41	39	31	45
San Diego	56	56	78	56
Santa Barbara	57	58	61	57
Carnegie-Mellon U.	46	48	48	45
Case Western Reserve U.	42	45	35	46
Catholic U.	43	43	37	39
U. of Chicago	68	65	53	67
U. of Cincinnati	47	47	51	49
City U. of New York Graduate School	63	58	56	60
Claremont Graduate School	49	47	55	45
U. of Colorado	45	44	42	43
Columbia U.	68	66	37	67
U. of Connecticut	50	50	57	44
Cornell U.	62	63	41	64
U. of Delaware	50	51	72	48
U. of Denver	35	34	51	38
Duke U.	60	60	60	62
Emory U.	52	55	55	51
U. of Florida	45	44	54	45
Florida St. U.	43	44	52	41
Fordham U.	39	38	42	37
George Washington U.	42	43	43	42
Georgetown U.	38	44	41	41
U. of Georgia	50	46	53	49
Harvard U.	70	67	34	73
U. of Hawaii	45	43	66	37
Howard U.	36	35	45	36
U. of Illinois				
Chicago	53	52	57	55
Urbana-Champaign	56	58	47	58
Indiana U.	63	63	67	65
U. of Iowa	58	58	51	58
Johns Hopkins U.	66	67	53	65
U. of Kansas	52	52	55	48
Kent St. U.	47	44	52	46
U. of Kentucky	49	49	52	46
Louisiana St. U.	46	50	32	45
Loyola U. of Chicago	38	37	51	38
U. of Maine	37	39	46	41
U. of Maryland	54	53	50	56
U. of Massachusetts	67	44	[illegible]	[illegible]
Miami U. (Ohio)	[illegible]	[illegible]	—	38
U. of Michigan	68	67	53	65
Michigan St. U.	49	51	38	52
U. of Minnesota	57	59	53	58
Mississippi St. U.	33	34	57	38
U. of Missouri	53	54	49	52
U. of Nebraska	47	49	41	49
U. of New Hampshire	43	39	57	42
New York U.	54	56	61	55
U. of North Carolina	62	63	52	62
North Texas St. U.	37	35	60	38
Northwestern U.	61	61	54	60
U. of Notre Dame	43	44	38	47
Ohio St. U.	52	54	46	53
U. of Oklahoma	48	48	55	48
Oklahoma St. U.*	36	33	34	38
U. of Oregon	45	48	34	45
U. of Pennsylvania	63	62	55	63
Pennsylvania St. U.	42	40	26	43
U. of Pittsburgh	52	54	37	51
Princeton U.	70	69	53	70
Rice U.	52	54	42	50
U. of Rochester	61	61	41	60
Rutgers U.	57	58	61	58
St. U. of New York				
Binghamton	49	49	56	50
Buffalo	47	46	42	46
Stony Brook	53	53	45	54
Saint Louis U.	37	36	38	36
U. of South Carolina	48	47	67	48
U. of Southern California	44	44	44	43
Stanford U.	67	68	43	67
Syracuse U.	48	48	56	46
Temple U.	50	48	58	49
U. of Tennessee	43	43	48	41
U. of Texas, Austin	59	59	61	60
Texas Christian U.	34	33	46	39
Texas Tech U.	33	34	38	36
U. of Toledo	42	40	51	44
Tulane U.	48	47	51	48
U. of Utah	42	43	57	38
Vanderbilt U.	56	55	61	52
U. of Virginia	60	62	64	64
Washington U. (Mo.)	52	53	46	50
U. of Washington	58	59	53	59
Washington St. U.	36	37	41	[illegible]
Wayne St. U.	42	39	37	41
West Virginia U.	37	35	38	35
U. of Wisconsin	65	64	32	69
Yale U.	71	71	49	71

Note: Ratings are standardized on a scale where 50 represents the average score for all rated departments.

(a) Rating of scholarly quality of faculty members in the program.

(b) Rating of the effectiveness of the program in education of research scholars or scientists.

(c) Rating of improvement in program quality in the last five years.

(d) Rating of the evaluators' familiarity with the work of program faculty.

* Program was initiated after 1970.

— Not a reliable.

Political Science

	Faculty quality (a)	Effectiveness (b)	Improvement (c)	Familiarity (d)
U. of Arizona*	50	48	78	48
Atlanta U.*	27	28	41	31
Boston U.	46	44	35	47
Brandeis U.	50	48	38	50
City U. of New York Graduate School	56	58	41	52
U. of California				
Berkeley	71	67	49	70
Davis	47	46	60	44
Los Angeles	59	59	50	59
Riverside	44	41	38	46
San Diego*	53	58	66	56
Santa Barbara	51	58	50	53
Catholic U.	38	37	55	38
U. of Chicago	70	68	47	69
U. of Cincinnati	38	38	49	40
Claremont Graduate School	46	47	39	44
U. of Colorado	46	46	52	39
Columbia U.	60	56	44	60
U. of Connecticut	47	45	49	47
Cornell U.	62	62	59	63
Duke U.	58	57	64	60
Emory U.	38	39	58	37
U. of Florida	46	44	48	41
Florida State U.	49	50	64	49
George Washington U.	43	43	55	43
Georgetown U.	44	44	44	47
U. of Georgia	48	48	63	49
Harvard U.	71	67	50	71
U. of Hawaii	55	53	54	56
Howard U.	36	35	47	32
U. of Idaho	28	29	50	32
U. of Illinois	57	59	67	56
Indiana U.	59	60	57	58
U. of Iowa	55	58	48	54
Johns Hopkins U.	56	56	44	58
U. of Kansas	44	43	52	39
Kent State U.	37	39	50	35
U. of Kentucky	50	53	53	51
U. of Maryland	51	52	57	54
Massachusetts Inst. of Tech.	67	67	48	65
U. of Massachusetts	53	52	[illegible]	52
Miami U. (Ohio)	41	40	43	41
U. of Michigan	70	69	48	69
Michigan State U.	52	55	33	54
U. of Minnesota	62	65	61	64
U. of Missouri	44	43	45	42
U. of Nebraska	42	41	56	40
New Sch. for Social Research	34	35	20	41
New York U.	50	49	44	48
U. of North Carolina	60	62	61	60
Northern Illinois U.	37	37	45	38
Northwestern U.	60	62	47	59
U. of Notre Dame	44	44	51	42
Ohio State U.	57	59	67	59
U. of Oklahoma	41	44	55	35
U. of Oregon	51	53	41	52
U. of Pennsylvania*	53	49	33	53
Pennsylvania State U.	47	48	39	45
U. of Pittsburgh	52	55	47	52
Princeton U.	63	61	44	65
Purdue U.	45	43	51	47
Rice U.*	40	42	51	42
U. of Rochester	61	66	52	62
Rutgers U.	54	55	59	54
St. U. of New York				
Albany	44	45	51	43
Binghamton	44	45	54	45
Buffalo	49	51	38	48
U. of Southern California	50	47	56	51
Southern Illinois U.	36	36	37	41
Stanford U.	66	67	39	67
Syracuse U.	49	52	41	50
Temple U.	45	44	43	47
U. of Tennessee	42	40	50	39
U. of Texas, Austin	54	54	46	51
Tulane U.	38	39	41	39
U. of Utah	35	33	45	34
Vanderbilt U.	52	52	49	52
U. of Virginia	52	52	58	49
Washington U. (Mo.)	57	61	58	58
U. of Washington	54	53	66	55
West Virginia U.	34	34	52	34
U. of Wisconsin				
Madison	66	66	49	68
Milwaukee	46	48	67	47
Yale U.	72	72	45	70

Psychology

	Faculty quality (a)	Effectiveness (b)	Improvement (c)	Familiarity (d)
Adelphi U.	37	33	35	40
U. of Alabama	42	46	51	44
U. of Arizona	48	47	58	47
Arizona St. U.	51	50	49	52
U. of Arkansas	36	38	36	39
Auburn U.	41	37	71	40
Baylor U.	35	33	44	38
Boston U.	53	52	58	48
Bowling Green St. U.	49	53	49	46
Brandeis U.	50	46	42	49
Brigham Young U.	40	—	—	38
Brown U.	61	62	40	56
Bryn Mawr C.	43	48	41	44
California Sch. of Professional Psychology				
Berkeley*	35	38	56	40
San Diego*	31	22	54	38
U. of California				
Berkeley	69	66	40	71
Davis	48	48	44	45
Irvine				
Social science	51	48	49	44
Biological science	56	57	56	44
Los Angeles	68	65	57	68
Riverside	46	46	38	45
San Diego	66	63	64	65
Santa Barbara	57	57	51	57
Carnegie-Mellon U.	65	65	72	62
Case Western Reserve U.	41	43	22	40
Catholic U. of America	46	47	52	44
U. of Chicago	67	62	51	66
U. of Cincinnati	48	47	48	49
City U. of New York Graduate School	61	58	39	59
Claremont Graduate School	48	46	60	46
Clark U.	49	51	42	50
U. of Colorado	64	63	60	66
Colorado St. U.	42	42	49	41
Columbia Teachers C.	54	52	36	53
Columbia U.	64	62	32	65
U. of Connecticut	58	58	55	60
Cornell U.	63	61	58	65
U. of Delaware	45	44	57	45
U. of Denver	54	53	65	54
DePaul U.	36	34	—	38
U. of Detroit	33	—	—	35
Duke U.	61	60	44	61
Emory U.	48	40	39	48
U. of Florida	54	54	49	56
Florida St. U.	53	53	48	55
Fordham U.	42	38	—	39
Fuller Theological Seminary	38	34	—	38
George Washington U.	42	41	—	39
U. of Georgia	52	53	62	53
Georgia St. U.	45	44	61	44
Harvard U.	70	64	41	77
U. of Hawaii	50	47	47	[illegible]
Hofstra U.*	31	29	—	38
U. of Houston	54	51	71	55
Illinois Inst. of Tech.	37	33	—	39
U. of Illinois				
Chicago	53	51	62	55
Urbana-Champaign	67	67	51	69
Indiana U.	63	64	50	62
U. of Iowa	58	59	36	59
Iowa St. U.*	45	45	37	41
Johns Hopkins U.	62	60	35	60
U. of Kansas				
Human development	56	57	46	47
Psychology	58	59	59	60
Kansas St. U.	50	48	40	46
Kent St. U.	45	46	47	45
U. of Kentucky	43	43	48	43
Long Island U., Brooklyn	38	31	—	40
Louisiana St. U.	42	38	44	41
U. of Louisville	43	44	55	43
Loyola U. of Chicago	47	48	53	47
U. of Maryland	54	55	51	56
Massachusetts Inst. of Tech.	62	63	40	56
U. of Massachusetts	57	56	57	61
Miami U. (Ohio)	45	46	53	42
U. of Miami	47	44	57	46
U. of Michigan	70	67	37	70
Michigan St. U.	56	57	48	55
U. of Minnesota	68	69	49	71
U. of Mississippi	38	32	53	39
U. of Missouri	50	50	38	49
U. of Montana	38	41	52	39
U. of Nebraska	46	46	42	44
U. of New Hampshire	43	43	62	42
U. of New Mexico	51	53	54	50
New Sch. for Social Research	56	49	40	56
New York U.	[illegible]	57	52	57
U. of North Carolina				
Chapel Hill	62	61	51	62
Greensboro*	45	49	67	42
North Carolina St. U.	42	—	—	41
U. of North Dakota	36	41	—	38
North Texas St. U.*	37	34	58	39
Northeastern U.	48	47	56	49
Northern Illinois U.	43	44	49	43
Northwestern U.	61	62	31	61
U. of Notre Dame	40	40	47	41
Ohio U.	44	44	47	42
Ohio St. U.	59	59	37	61
U. of Oklahoma	42	46	44	42
Oklahoma St. U.	38	38	—	38
U. of Oregon	63	64	[illegible]	65
U. of Pennsylvania	69	69	48	70
Pennsylvania St. U.	61	61	50	59
U. of Pittsburgh	58	58	69	60
Princeton U.	63	62	51	61
Purdue U.	59	57	61	63
U. of Rhode Island	42	42	40	42

Continued on Following Page

Teachers of Clinical Law Seek Recognition, Better Treatment

By BEVERLY T. WATKINS

CINCINNATI

"I am tired of fighting to legitimize clinical teaching in the law schools," says Elliott S. Milstein, a professor of law at American University, about the programs that teach students the practical skills needed to practice law, such as research, client counseling, and court procedures.

"Every serious study in the last six years has endorsed what we do. Students in clinical education say it is the most pedagogically useful part of their entire legal education.

"And still the law schools treat clinicians with something approaching disdain," Mr. Milstein told a meeting of the Association of American Law Schools here this month.

Mr. Milstein, who directs a clinical program, complained that "the law schools withhold the symbols and perquisites of the profession from us. They deny us promotions and titles. They deny us the voting rights and salaries of other faculty members. This leads to the myth that teaching lawyering skills is beneath the law schools."

With these remarks, Mr. Milstein summed up for academic administrators and law-school faculty members the growing resentment and frustration of his colleagues in clinical law over their uncertain—and often second-class—status within the university.

Clinical teachers are now demanding treatment equal to that given faculty members who teach the traditional law curriculum, in which students learn the law by studying judicial opinions.

In clinical programs, students work with real or simulated cases to learn the techniques of legal research, counseling, court procedures, negotiation, and other skills. Almost all of the 174 law schools approved by the American Bar Association offer some clinical programs.

If they are to provide high-quality programs that teach students how to think and act like lawyers, clinical teachers say they must have the recognition, job security, and protection that come with tenure.

Questions of Status

The academic status of the clinical faculty members—and what to do about it—commanded the attention of members of the law-school association for much of their meeting. Among the questions debated:

▶ Should full-time clinical teachers, like other law faculty members, be eligible for tenure if they meet the established criteria? Should they be eligible for tenure but be evaluated by criteria that require less scholarly production? Or should they have some other form of job security, such as long-term contracts?

▶ Should clinical faculty members be able to participate in academic governance, joining the tenured law faculty in making decisions about hiring, promotions, and curriculum? Should their participation be limited?

▶ Should all law schools be required to have a formal policy on the status of clinical faculty members? Or should each school resolve the issue for itself?

The Association of American Law Schools and the American Bar Association, which accredits the schools, have been considering proposals on the status of clinical faculty members for several years. In 1980 a joint committee of the two groups developed a set of guidelines, and the A.B.A.'s accreditation committee decided that clinical teachers were regular faculty members.

In 1982 the same A.B.A. committee proposed a new accreditation standard that would require law schools to give full-time clinical teachers a status "substantially equivalent" to that of other faculty members.

Most educators at the meeting agreed the issue of status was "a tough one," as Sanford H. Kadish, a past president of the association and professor of law at the University of California at Berkeley, put it.

"Today's clinical movement is a product of only the last 10 years or so," he said. "When most programs were developmental and experimental, the issue of the status of the clinical teacher was not much considered.

"Now many law schools have fairly well-established programs staffed by lawyers who teach clinical courses on a full-time basis," he said. "Their offerings are regarded as a staple of their school's educational program. The status of these teachers has become a pressing issue."

When the association's House of Representatives opened its meeting for a discussion of the A.B.A.'s proposal for "substantially equivalent" status, Elizabeth M. Schneider, a clinical staff attorney at the Rutgers University law school in Newark, contended that "nothing less than full tenure is appropriate" for clinical teachers.

'A Full and Equal Partner'

"The only principled position," she said, "is to say clinical legal education is a full and equal partner within the law school and that we are fully equal. The proposed standard would reinforce the notion that we are not the same."

E. Clinton Bamberger, Jr., a professor of law at the University of Maryland, charged that the proposal to offer alternatives to established law-school tenure policies was "an effort to hold clinical faculty 'outside,' so the changes in the method of law-school teaching that we have encouraged will not be successful."

Although academic institutions may think "we clinicians have dirty practicing hands and we may get everybody dirty," said Mr. Bamberger, the law schools should not be allowed "to create a separate class of law teachers," as they could under the A.B.A.'s proposed standard.

David H. Vernon, president of the law-school association and a professor of law at the University of Iowa, called the A.B.A.'s proposal "premature."

Among other things, he said, "the proposed standard is an invasion of traditional law-school territory. It is an expression of lack of confidence in the law schools. It implies that we are unfit to govern ourselves."

He pointed out that some law schools had already developed "job-security systems" for full-time clinical teachers, and the rest should have an opportunity to resolve the problem of faculty status individually, rather than have "a rigid system of personnel policy imposed on them."

The law-school association's committee on clinical legal education, which made its recent study of the A.B.A.'s proposal available at the meeting, concluded that the standard "conforms more closely to its views than any other approach." The committee said that, for the most part, it favored the bar association's ideas.

The executive committee of the law-school association expects to take a formal position on the proposal early this year. A committee of the bar association, which is holding hearings on the standard, will consider the issue at a meeting next month.

FACT-FILE—Continued

Psychology

Continued from Preceding Page

	Faculty quality (a)	Effective-ness (b)	Improve-ment (c)	Famil-iarity (d)
Rice U.*	38	36	—	38
U. of Rochester	56	58	41	56
Rosemead Graduate Sch.*	33	—	—	35
Rutgers U				
New Brunswick	60	58	62	63
Newark	48	50	35	47
St. U. of New York				
Albany	51	54	60	51
Binghamton	51	49	67	51
Buffalo	56	58	55	56
Stony Brook	61	62	50	53
Saint Louis U	40	35	38	39
U. of South Carolina	44	43	57	42
U. of South Dakota	38	41	—	38
U. of South Florida*	51	40	62	51
U. of Southern California	58	57	60	57
Southern Illinois U	40	51	38	51
U. of Southern Mississippi	32	—	—	37
Stanford U	72	71	46	75
Syracuse U	50	48	38	48
Temple U.	51	50	50	53
U. of Tennessee	48	49	43	50
U. of Texas, Austin	63	61	45	65
Texas Christian U	44	—	—	40
Texas Tech U	39	36	54	39
Texas Woman's U.*	29	—	—	30
U. of Toledo	35	—	—	38
Tulane U	43	43	38	45
U. of Utah	54	55	65	53
Utah St. U	38	37	52	38
Vanderbilt U	56	58	50	56
U. of Vermont	48	48	54	46
U. of Virginia	58	57	71	62
Virginia Commonwealth U				
Medical school*	44	42	61	41
Virginia Poly. Inst. & St. U.	47	44	69	44
Washington U. (Mo.)	53	52	47	53
U. of Washington	63	62	62	64
Washington St. U	46	47	50	45
Wayne St. U	46	47	47	47
West Virginia U	47	47	54	45
Western Michigan U.*	44	44	39	43
U. of Wisconsin				
Madison	64	63	35	66
Milwaukee	44	43	58	43
U. of Wyoming	35	36	53	39
Yale U	70	69	50	69
Yeshiva U	40	38	36	41

Sociology

	Faculty quality (a)	Effective-ness (b)	Improve-ment (c)	Famil-iarity (d)
U. of Akron*	41	42	60	47
American U	38	37	44	39
U. of Arizona	66	61	78	65
Boston U.*	52	54	58	51
Bowling Green St. U.*	40	41	50	39
Brandeis U	52	50	37	49
Brigham Young U	43	47	56	38
Brown U	53	56	46	50
U. of California				
Berkeley	69	65	40	67
Davis	52	50	47	52
Los Angeles	65	64	63	64
Riverside	49	48	45	50
San Diego	58	56	57	58
Santa Barbara	57	56	58	58
Case Western Reserve U	38	37	26	42
Catholic U	35	34	52	36
U. of Chicago	71	67	48	69
City U. of New York				
Graduate School	57	55	47	56
U. of Colorado	44	46	46	43
Columbia U	66	63	36	65
U. of Connecticut	49	50	48	49
Cornell U	59	60	49	60
U. of Denver*	30	36	46	46
Duke U	56	59	49	60
Emory U	43	43	43	44
U. of Florida	44	43	52	43
Florida St. U	48	49	58	46
Fordham U	43	43	52	39
U. of Georgia	47	48	64	47
Harvard U.*	67	66	37	67
U. of Hawaii	44	40	41	39
U. of Illinois				
Chicago	51	51	64	52
Urbana-Champaign	60	59	56	61
Indiana U	60	66	62	63
U. of Iowa	48	48	48	46
Iowa St. U	44	48	51	39
Johns Hopkins U	52	56	31	53
U. of Kansas	45	46	50	45
Kansas St. U.*	37	39	49	36
Kent St. U.*	40	39	43	38
U. of Kentucky	46	49	46	45
Louisiana St. U	35	39	36	36
Loyola U. of Chicago	41	38	50	41
U. of Maryland	52	52	67	53
U. of Massachusetts	50	59	69	60
U. of Michigan	69	71	42	67
Michigan St. U	53	56	43	55
U. of Minnesota	58	60	46	56
Mississippi St. U	33	34	45	35
U. of Missouri	49	50	55	46
U. of Nebraska	46	47	49	43
U. of New Hampshire	44	40	51	44
New Sch. for Social Research	41	39	26	53
New York U	57	56	53	59
U. of North Carolina	67	69	54	67
North Carolina St. U	40	41	45	36
North Texas St. U.*	31	28	—	32
Northwestern U	58	57	58	59
U. of Notre Dame	43	45	42	43
Ohio St. U	49	50	39	49
Oklahoma St. U	35	34	49	34
U. of Oregon	40	50	42	49
U. of Pennsylvania	63	61	58	62
Pennsylvania St. U	47	51	53	47
U. of Pittsburgh	50	53	46	46
Princeton U	60	59	47	61
Purdue U	48	50	43	48
Rutgers U	56	54	59	55
St. U. of New York				
Albany*	56	55	78	57
Binghamton*	52	51	68	52
Buffalo	40	48	41	45
Stony Brook	62	60	59	62
U. of Southern California	58	57	61	58
Southern Illinois U	42	40	44	42
Stanford U	66	66	60	64
Syracuse U	48	47	44	50
Temple U	47	47	51	45
U. of Tennessee	41	42	53	42
U. of Texas, Austin	60	60	50	59
Texas Woman's U.*	28	27	—	30
Tulane U	38	35	35	38
U. of Utah	39	40	53	37
Vanderbilt U	53	53	46	56
U. of Virginia	52	50	64	56
Virginia Poly. Inst. & St. U.*	41	41	56	43
Washington U. (Mo.)	46	46	27	46
U. of Washington	64	66	62	63
Washington St. U	56	50	58	55
Wayne St. U	40	30	38	41
Western Michigan U	38	37	49	37
U. of Wisconsin	70	73	50	70
Yale U	62	58	49	63

Note: Ratings are standardized on a scale where 50 represents the average score for all rated departments.
(a) Rating of scholarly quality of faculty members in the program.
(b) Rating of the effectiveness of the program in education of research scholars or scientists.
(c) Rating of improvement in program quality in the last five years.
(d) Rating of the evaluators' familiarity with the work of program faculty.
* Program was initiated after 1970.
n.a. Not available.

SOURCE: CONFERENCE BOARD OF ASSOCIATED RESEARCH COUNCILS

'In' Box

The lines are being drawn for what could be a protracted and emotional debate over proposed changes in federal copyright regulations.

On one side: librarians and members of academe. On the other side: the publishing industry and—to some critics, at least—David Ladd, the Register of Copyrights. The forum: Congress and the courts.

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Librarians are angry over a report Mr. Ladd sent to Congress this month in which the U.S. Copyright Office supported a range of proposals favored by publishers for additional steps to regulate photocopying and compensate copyright owners.

"It's not the disinterested, objective report of the situation we would like to have seen," said Shirley Echelman, executive director of the Association of Research Libraries.

Nancy H. Marshall, chairman of the American Library Association's copyright subcommittee, said at an association meeting last week that she was "incredulous" over portions of the Register's report. She called it "almost a negation of the statutory recognition of 'fair use' " of copyrighted works by educators.

The report supported charging those who copy protected works a "reasonable fee," developing "collective licensing arrangements," and considering a surcharge on copying equipment.

According to Ms. Echelman, librarians acknowledge that copyright owners should be compensated but say that the public has an overriding right to free access to information.

She also warned that giving librarians a "watchdog" role over photocopying—which she said the report tacitly supported—would violate the public's right to privacy.

Some librarians and academics also accuse the publishing industry of trying to "intimidate" them through a lawsuit for copyright infringement against New York University and individual faculty members there.

A formal response from the university, in a U.S. district court, is expected this week.

Publishers are "trying to frighten us into doing things the law does not require us to do," said Alfred D. Sumberg, director of governmental relations at the American Association of University Professors, but he added: "We will not be intimidated."

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A nationwide external degree program leading to a master's in management and supervision—with a concentration in personnel management in higher education—is being offered by Central Michigan University with the help of the College and University Personnel Association.

The unusual program, including course work at conferences sponsored by the association, offers evening and weekend classes at 48 centers as part of Central Michigan's Institute for Personal and Career Development. For details, contact Olivia Kogler, C.U.P.A.-C.M.U. Program Representative, 2233 Wisconsin Avenue, N.W., Suite 318, Washington 20007; (202) 338-0821.

Personal & Professional

When Academe Meets the Press: Initiative and Common Sense May Smooth the Way

By SUZANNE PERRY

When *Time* magazine named the computer "Machine of the Year" a few weeks ago, it quoted an industrial psychologist at the University of Virginia, a futurist at the University of Southern California, and three computer specialists at the Massachusetts Institute of Technology.

Inevitably, the choice of a machine rather than a person caused a stir—and some second-guessing—both inside and outside journalism. But in its choice of people to quote, the magazine's cover story was just another example of a common phenomenon:

When reporters need authoritative sources and colorful comments for their news and feature stories, they often turn to people in academe. As a result, newspapers, magazines, and television and radio broadcasts are regularly sprinkled with observations from scientists, economists, sociologists, and other experts from the campuses.

Many colleges and universities, meanwhile, are eager to see positive news reach alumni and donors, potential students and their parents, and the public at large. As competition for money and students increases, so does the pressure on institutions to generate favorable publicity.

Thus many campus news offices produce a steady stream of press releases about their institutions' programs and people in an ambitious quest for media attention.

But while they often find the spotlight gratifying, faculty members and administrators who have dealt directly with the press say the experience can sometimes be frustrating.

Complaints of Inaccuracy

Among their major complaints are inaccurate reporting, hurried accounts that fail to explain complex or subtle points adequately and—in some instances—outright sensationalism.

When Leonid Brezhnev died in November, for example, two Virginia television stations asked Morris A. McCain, professor of government at the College of William and Mary, for his observations. Their request was logical enough, since Mr. McCain is an expert on Russian politics. But the interviews themselves—the professor's first ever on TV—were another matter.

To his surprise, he says, the reporters "told me almost nothing and asked me al-

Continued on Following Page

HERB WEITMAN, WASHINGTON UNIVERSITY IN ST. LOUIS

In dealing with reporters, says Murray L. Weidenbaum, former Presidential adviser, "don't filibuster." Above, the economics professor at a press conference on his return to academe last year.

10 'Rules' for the Media Game

The secret of good relations with the news media, says Murray L. Weidenbaum, professor of economics at Washington University in St. Louis, is to tell it straight, say it in English, and show reporters "common courtesy."

Drawing on his experiences in the government—he was an Assistant Secretary of the Treasury in the Nixon Administration and, until last fall, chairman of President Reagan's Council of Economic Advisers—Mr. Weidenbaum developed the following "rules for success in dealing with the press":

"1. Do not utter falsehoods.

"2. Avoid prevaricating.

"3. Never lie.

"4. When you don't know, just say you don't know. Try to find out.

"5. When you can't say, don't filibuster—just say you can't say or 'No comment.'

"6. Speak English at all times. No one will revoke your Ph.D.

"7. Take press calls if you possibly can—or your point of view may miss the deadline.

"8. Return every press call as promptly as you can. Common courtesy may carry you a long way.

"9. Refrain from writing letters to the editor or making irate phone calls to the publisher—so long as they spell your name right.

"10. Do not hesitate to tell a reporter to his/her face that he/she was wrong, stupid, etc.—but make sure he/she *was* wrong, stupid, etc."—SUZANNE PERRY

Social Scientists, Engineers Show Biggest Gains in Pay

Social scientists and engineers made the biggest percentage gains in faculty salaries this year, according to the Chronicle Survey.

The average 1982-83 salary for faculty members in the social sciences rose 8.9 per cent to $26,756. The average salary in engineering is $30,381, an increase of 8.5 per cent.

The average salary for full professors in the humanities is $32,088, which is 67 per cent more than the $19,256 average for assistant professors in the humanities.

The salary difference between ranks is greater in the humanities than in engineering, where the full professors' average of $36,367 is 49 per cent higher than the $24,343 for assistant professors.

Average 1982-83 salaries by rank in eight discipline groups are estimated on the basis of data collected from 4,235 faculty members in a survey designed and conducted for *The Chronicle* by John Minter Associates of Boulder, Colo., a research organization that specializes in higher-education studies.

The figures represent nine-month salaries, not including fringe benefits, extra earnings, or the value of contributed services.

Faculty members at law and medical schools, proprietary institutions, private two-year colleges, and institutions with fewer than 500 students were not included in the sample.

The average faculty salary in 1982-83 is up 7.2 per cent in the humanities to $24,776; up 7 per cent in the arts to $24,828; up 6.8 per cent in business and economics to $28,229; up 6.8 per cent in science and mathematics to $26,189; up 6.7 per cent in physical education to $24,673; and up 6.6 per cent in vocational education—a group that includes nursing, health, and home economics—to $23,406.

The survey data for faculty members in all disciplines (*The Chronicle*, January 5) show that the average salary for all ranks at all types of institution is up 7.6 per cent in 1982-83 to an estimated $26,063.

—JACK MAGARRELL

A table showing the findings of the Chronicle Survey on faculty salaries by discipline appears on Page 28.

CHRONICLE SURVEY

Faculty Salaries for 1982-83 by Rank and Discipline

	All institutions				Public 4-year institutions				Private 4-year institutions			
	Average (a)	Increase (b)	High (c)	Low (d)	Average (a)	Increase (b)	High (c)	Low (d)	Average (a)	Increase (b)	High (c)	Low (d)
Arts, fine and applied												
Professor	$31,275	6.3%	$34,936	$26,456	$31,167	6.0%	$34,664	$27,670	—	—	—	—
Associate professor	24,114	7.5%	27,279	22,844	25,016	6.8%	29,223	24,424	—	—	—	—
Assistant professor	19,592	8.4%	22,258	18,002	20,046	8.5%	22,653	19,490	$17,958	9.1%	$20,459	$15,458
All ranks (e)	24,828	7.0%	30,820	18,306	25,461	7.3%	31,322	19,600	22,829	9.8%	28,705	14,920
Business and economics												
Professor	32,754	6.3%	38,777	26,731	37,261	4.7%	43,047	31,475	—	—	—	—
Associate professor	27,861	7.6%	31,182	24,541	28,773	6.5%	32,434	25,112	28,911	12.4%	31,639	26,183
Assistant professor	24,022	7.2%	27,413	20,631	24,500	6.7%	27,655	21,345	24,043	9.5%	27,357	20,728
All ranks (e)	28,229	6.8%	34,037	22,421	29,868	5.9%	35,987	23,749	28,796	10.5%	35,039	22,552
Engineering												
Professor	36,367	7.5%	40,532	32,202	37,364	6.6%	41,307	33,421	38,709	9.8%	44,012	33,405
Associate professor	28,812	9.7%	32,056	25,568	29,109	8.7%	32,957	25,260	27,995	12.0%	30,863	25,127
Assistant professor	24,343	10.4%	27,092	21,594	25,003	9.5%	28,271	21,735	25,641	13.9%	28,153	23,129
All ranks (e)	30,381	8.5%	35,900	24,863	31,711	7.8%	37,511	25,912	30,507	10.6%	36,146	24,869
Humanities (f)												
Professor	32,088	7.2%	37,401	26,983	32,649	6.4%	38,558	26,740	32,224	8.3%	37,124	28,124
Associate professor	24,062	7.9%	27,243	20,881	25,629	7.3%	28,573	22,685	20,955	9.1%	24,621	17,288
Assistant professor	19,256	6.8%	21,444	17,068	19,135	5.4%	21,110	17,159	18,483	8.5%	20,388	16,579
All ranks (e)	24,776	7.2%	30,456	19,096	25,875	6.5%	31,640	20,110	23,627	7.8%	30,085	17,168
Physical education												
Professor	29,533	5.9%	32,774	26,292	—	—	—	—	26,381	5.9%	29,493	23,269
Associate professor	24,338	7.0%	26,747	21,929	24,878	5.9%	26,875	22,882	23,824	9.2%	26,371	21,276
Assistant professor	20,644	7.8%	22,713	18,575	20,930	7.2%	23,118	18,742	20,080	9.3%	21,810	18,350
All ranks (e)	24,673	6.7%	29,247	20,099	25,502	5.7%	30,209	20,795	23,580	8.5%	28,354	18,806
Science and mathematics												
Professor	31,876	6.4%	36,600	27,151	32,513	5.3%	36,785	28,242	33,771	9.2%	40,044	27,499
Associate professor	25,829	7.3%	32,133	25,608	26,708	6.2%	35,614	29,413	24,607	10.1%	27,632	21,582
Assistant professor	21,458	9.4%	23,857	19,059	22,177	8.6%	24,823	19,530	21,153	11.2%	23,700	18,606
All ranks (e)	26,189	6.8%	31,436	20,942	26,556	5.4%	31,731	21,381	26,712	9.4%	32,685	20,739
Social sciences												
Professor	32,451	7.4%	37,281	27,621	33,344	7.3%	38,317	28,372	31,904	7.9%	38,171	25,637
Associate professor	24,729	9.6%	28,776	20,681	25,128	9.8%	29,979	20,277	23,797	10.3%	27,061	20,532
Assistant professor	19,874	7.6%	22,013	17,735	20,678	7.2%	23,029	18,327	18,891	10.2%	20,742	17,039
All ranks (e)	26,756	8.9%	32,831	20,681	28,072	10.0%	34,423	21,722	24,971	9.1%	30,898	19,044
Vocational education (g)												
Professor	31,368	4.4%	36,325	26,412	32,823	2.8%	39,270	26,376	—	—	—	—
Associate professor	25,303	6.6%	28,103	22,503	28,364	7.1%	31,913	24,815	—	—	—	—
Assistant professor	20,911	8.4%	23,827	17,994	22,114	9.9%	25,180	19,047	18,136	6.7%	20,173	16,099
All ranks (e)	23,406	6.6%	27,561	19,251	25,823	6.5%	29,987	21,659	19,855	7.4%	23,352	16,357

	All 4-year institutions				Public 2-year institutions				All public institutions			
	Average (a)	Increase (b)	High (c)	Low (d)	Average (a)	Increase (b)	High (c)	Low (d)	Average (a)	Increase (b)	High (c)	Low (d)
Arts, fine and applied												
Professor	$30,958	6.4%	$34,473	$26,582	—	—	—	—	$31,694	5.8%	$35,381	$28,008
Associate professor	24,168	7.7%	27,812	23,438	—	—	—	—	25,340	6.1%	29,162	24,081
Assistant professor	19,641	8.6%	22,227	18,708	—	—	—	—	20,170	8.2%	22,894	18,901
All ranks (e)	24,950	7.8%	30,814	18,692	$25,712	3.0%	$32,164	$19,260	25,534	6.1%	31,567	19,501
Business and economics												
Professor	35,350	5.7%	41,694	29,007	28,256	6.0%	31,654	24,858	34,641	5.1%	39,732	29,550
Associate professor	28,799	7.6%	32,280	25,319	24,366	4.4%	27,575	21,156	27,490	5.9%	31,020	23,961
Assistant professor	24,411	7.2%	27,597	21,226	—	—	—	—	24,015	6.4%	27,432	20,597
All ranks (e)	29,660	6.8%	35,803	23,516	23,549	4.8%	28,069	19,030	28,029	5.6%	33,583	22,375
Engineering												
Professor	37,625	7.2%	41,832	33,418	31,096	6.8%	34,418	27,774	35,540	6.6%	39,302	31,778
Associate professor	28,893	9.3%	32,551	25,235	—	—	—	—	29,100	8.9%	32,477	25,724
Assistant professor	25,127	10.4%	28,248	22,005	—	—	—	—	23,884	9.1%	26,717	21,052
All ranks (e)	31,478	8.3%	37,246	25,709	26,988	7.5%	31,675	22,301	30,337	7.7%	35,813	24,861
Humanities (f)												
Professor	32,567	6.8%	38,280	27,009	—	—	—	—	32,040	6.8%	37,499	26,580
Associate professor	24,722	7.6%	27,806	21,638	24,016	8.2%	27,183	20,849	25,159	7.6%	28,168	22,150
Assistant professor	19,008	6.0%	20,970	17,046	20,490	8.4%	23,539	17,442	19,529	6.3%	21,817	17,241
All ranks (e)	25,439	6.8%	31,339	19,539	23,493	8.2%	28,019	18,968	25,182	7.0%	30,586	19,777
Physical education												
Professor	30,929	5.7%	34,302	27,556	—	—	—	—	30,646	5.9%	33,933	27,359
Associate professor	24,674	6.5%	26,777	22,570	—	—	—	—	24,520	6.2%	26,880	22,159
Assistant professor	20,765	7.6%	22,865	18,666	—	—	—	—	20,843	7.3%	23,031	18,654
All ranks (e)	25,129	6.3%	29,849	20,410	23,980	6.8%	27,988	19,973	25,059	6.0%	29,563	20,556
Science and mathematics												
Professor	32,757	6.1%	37,417	28,098	28,020	5.7%	31,969	24,072	31,206	5.4%	35,383	27,029
Associate professor	26,301	6.9%	34,065	27,894	25,169	6.6%	29,116	21,222	26,260	6.3%	33,723	27,029
Assistant professor	21,978	9.1%	24,605	19,351	20,078	9.1%	21,653	18,462	21,566	8.8%	23,912	19,219
All ranks (e)	26,586	6.2%	31,916	21,256	24,659	6.8%	29,199	20,119	26,004	5.8%	30,995	21,014
Social sciences												
Professor	33,065	7.4%	38,289	27,841	30,939	6.8%	33,676	28,202	32,644	7.2%	36,966	28,322
Associate professor	24,870	9.9%	29,413	20,327	24,887	8.1%	27,929	21,845	25,058	9.3%	29,382	20,734
Assistant professor	20,331	7.8%	22,585	18,077	—	—	—	—	20,221	6.7%	22,462	17,980
All ranks (e)	27,471	9.8%	33,740	21,202	25,714	5.9%	31,295	20,134	27,386	8.8%	33,513	21,259
Vocational education (g)												
Professor	32,297	3.8%	38,260	26,335	29,348	4.3%	31,896	26,800	31,812	3.2%	37,124	26,499
Associate professor	27,148	6.8%	30,095	24,201	—	—	—	—	26,435	7.0%	30,067	22,803
Assistant professor	21,342	9.2%	24,209	18,475	—	—	—	—	21,890	9.0%	25,117	18,664
All ranks (e)	24,665	6.7%	28,700	20,631	21,829	6.0%	26,760	16,898	24,661	6.3%	29,048	20,274

(a) Salary figures for faculty members employed on other than nine-month contracts are adjusted to a nine-month basis. Salary data include base salary only. They do not include fringe benefits or the value of contributed services.
(b) Increase of average salary for 1982-83 over average for 1981-82.
(c) About one-fifth reported salaries higher than the "high" salary (mean salary plus one mean deviation).
(d) About one-fifth reported salaries lower than the "low" salary (mean salary minus one mean deviation).
(e) Includes instructors.
(f) Includes language, literature, and communications.
(g) Includes home economics, health, and nursing.
— Insufficient data.

Note: Survey data are based on responses of 4,235 faculty members who offered courses from the fall of 1980 through the fall of 1982. To include faculty members newly hired, the sample was drawn from faculty lists that were revised in September, 1982.

Data are weighted to represent faculty members at colleges and universities of all types except law and medical schools, proprietary institutions, private two-year colleges, and colleges with fewer than 500 students.

Technical inquiries about the survey design and sampling techniques should be addressed to John Minter Associates, P.O. Box 107, Boulder, Colo. 80306.

SOURCE: SURVEY FOR THE CHRONICLE BY JOHN MINTER ASSOCIATES

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News Summary

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Courses on nuclear war are being organized on an increasing number of campuses across the United States. Story on Page 5.

Several institutions not usually ranked among the country's top research universities nevertheless received high marks for improvement in a recent survey. Story on Page 6.

U.S. veterinary schools may soon be producing more veterinarians than the country needs. Story on Page 8.

The ability to make more money ranks high among reasons to go to college, according to a survey of this year's freshmen. Story and Fact-File on Pages 10-12.

Rules to enforce a new law tying student aid to registration for the draft are expected soon—but so are challenges to the law from students and colleges. Story on Page 13.

Harry Edwards has long believed that black athletes, especially those in big-time college football and basketball, are exploited. Story on Page 17.

Running a meeting is not in most professors' job descriptions, but the ability to do it can be a valuable skill. Story on Page 23.

There are more editions of Shakespeare in heaven and earth, Horatio, than are dreamt of in your philosophy. Story on Page 27.

English-language universities in Quebec are enrolling an increasing number of French-speaking students. Story on Page 21.

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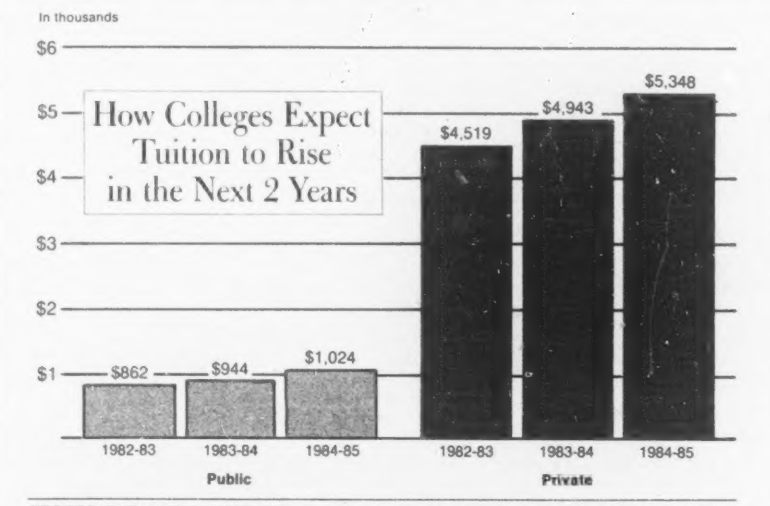

CHRONICLE CHART BY PETER H. STAFFORD

SOURCE: CHRONICLE SURVEY BY JOHN MINTER ASSOCIATES

Average tuition rates at four-year colleges and universities this year are compared above with averages projected by the institutions for the next two years. See story on Page 7.

2 Civil-Rights Leaders Denounce NCAA's New Academic Standards

By CHARLES S. FARRELL

Two prominent civil-rights leaders have joined several black-college presidents in denouncing new rules adopted by the National Collegiate Athletic Association that will require athletes to meet tougher academic standards.

The Rev. Jesse Jackson, president of Operation PUSH, and the Rev. Joseph Lowery, president of the Southern Christian Leadership Conference, announced their strong support for the position taken by the college presidents: that the new rules will discriminate against black college athletes. (Harry Edwards, a black sociologist and sports scholar, disagrees. See story on Page 17.)

Mr. Jackson met last week with about two dozen educators and clergymen at Southern University at the request of Jesse N. Stone, Jr., president of the university.

Mr. Stone is an outspoken critic of the rule changes adopted by the N.C.A.A. at its annual convention this month. The new regulations will require an athlete entering college to have a 2.0 grade-point average in 11 academic high-school courses, and to achieve a combined score of 700 on the Scholastic Aptitude Test or a 15 on the American College Testing Program's examination, in order to participate in sports in his freshman year.

The rules apply only to 277 institutions in the N.C.A.A.'s top Division I.

Mr. Stone and other black-college presidents argue that blacks generally do not score as high as whites do on standardized

Continued on Page 18, Column 1

Families Saving for College May Get Tax Breaks

An account similar to IRA is weighed by Reagan

By JANET HOOK

WASHINGTON

President Reagan is considering proposals to provide tax incentives for families to contribute to savings accounts for their children's college education, Administration officials said last week.

One option being considered would allow families to open education-savings accounts similar to Individual Retirement Accounts, which allow people to defer paying federal income taxes on their deposits—and the interest they earn—until they withdraw money during retirement.

Administration officials were still divided last week over whether to propose the savings plan, which is being considered as one possible element in the President's budget request for the coming fiscal year. The Administration's budget for fiscal 1984, which begins October 1, is expected to be released late this month

Tax Credits Backed, Too

Sources said the savings proposal might be included in President Reagan's State of the Union address, which is to be delivered before a joint session of Congress this week. The President was also reported to be planning to reaffirm his support for college-tuition tax credits in the address, but sources said it was unlikely that the Administration would propose such credits in the near future.

The plan to allow tax breaks for education savings similar to those provided for retirement accounts was just one of several approaches being weighed by the White House to encourage families to save for

Continued on Page 16, Column 1

AN ANALYSIS

The Conflict over Women's Retirement Benefits

Colleges appear to face a growing risk of financial liability for alleged discrimination

By R. CLAIRE GUTHRIE

The Reagan Administration surprised women's-rights advocates recently by agreeing with female faculty members who contend they should not be paid lower monthly retirement benefits than men receive.

That view is argued by a brief filed in the Supreme Court by the Solicitor General of the United States. It asks the Court to review a sex-discrimination case, *Spirt* v. *Long Island University*. Long Island is one of almost 3,000 universities and colleges that participate in the retirement programs offered by the Teachers Insurance and Annuity Association and the College Retirement Equities Fund.

The Reagan Administration has often been criticized as lacking a strong commitment to enforcing civil-rights laws, so its brief was surprising to the plaintiffs in *Spirt* and other pending cases that raise questions about the impact of federal civil-rights laws on retirement-annuity programs. It also was disturbing to representatives of the institutions and insurers who are defendants in the cases.

Among other things, the government's brief makes clear, perhaps for the first time in the extended litigation, that there may be a real divergence of legal interests between the colleges and such insurance companies as T.I.A.A. and C.R.E.F.

History of the Controversy

Spirt and eight other cases filed since the early 1970's against colleges and universities that offer their employees T.I.A.A.-C.R.E.F. plans raise this question:

Is it discriminatory for a woman who participates in such plans to receive lower monthly annuity payments after retirement than does a man of the same

Continued on Page 24, Column 3

Civil Rights

Continued from Page 1

tests because, they say, the tests reflect a cultural bias favoring whites. Figures from the College Board show the average combined score for all black students was 707 in 1982.

Mr. Jackson said in an interview that his meeting with Mr. Stone and the others was held "to reaffirm our goals so they will not be misinterpreted. We want to reaffirm our commitment to academic excellence, a core curriculum, and open admissions. We're taking a position minimizing standardized tests. We're alerting black organizations to the unreliability of standardized tests."

Mr. Jackson added that the coalition that met at Southern University would also "encourage black students to be careful of the new thrust of higher education that is designed to eliminate athletics as a route to higher education. We'll also alert school boards to the attempt to usurp their authority, and alert black people to the implementation date of this ruling."

Keeping Options Open

The N.C.A.A. rule changes go into effect August 1, 1986.

Mr. Jackson said that since that date is a few years away, the coalition wanted to keep its options open—options that include calling for the withdrawal of black colleges from the N.C.A.A. and from the American Council on Education, which supports the rule changes.

Mr. Jackson said he would like to meet with Walter Byers, executive director of the N.C.A.A., "to deal with the aspects that displease us." Among those aspects is a lack of commitment to desegregating faculty and coaching staffs while institutions are building stadiums and fieldhouses and enhancing their own images on the sweat and toil of the black athlete whose education historically has been ignored, Mr. Jackson said.

Mr. Jackson said he also wanted to raise with Mr. Byers the question of whether the N.C.A.A. has the authority to establish academic standards for colleges and a core curriculum for high schools. "It is infringing upon academic freedom," he said. "They are way out of their league, interfering with academic standards."

A spokesman for the N.C.A.A. said a meeting among Mr. Jackson, the black-college presidents, and Mr. Byers would not be difficult to arrange.

'Valued Members'

Jack W. Peltason, president of the A.C.E., said in an interview that he hoped black colleges would not withdraw from his organization. "They are valued members and have made important contributions," he said. "They have gained from participating, and other institutions have also gained from their participating."

As for the N.C.A.A.'s authority to establish academic standards, Mr. Peltason said, "The N.C.A.A. has for years had eligibility and academic standards. It's not like this is anything new. It's just a question of whether the current ones are acceptable."

Mr. Lowery, who did not attend the meeting at Southern, said in a telephone interview that the controversy generated by passage of the new academic standards "presents the emotional kind of occasion to see what has happened to the black athlete." He said colleges generally had ignored the education of black athletes and the new rules could make the situation worse by eliminating access to education for many.

"I think we have to look very carefully at anything that precludes an opportunity to pursue an education, an opportunity to pursue a career, on the basis of a test historically designed to our disadvantage," he said.

President Stone said he was "elated" by Mr. Jackson's and Mr. Lowery's support, because, he said, national leaders lend credence and call attention to the position that he and other black-college presidents have taken.

He called the new N.C.A.A. regulations "a disservice to blacks and other Americans who aspire to attain a higher education by participating in intercollegiate athletics."

'Pandora's Box'

The new rules were passed, he said, to deal with the exploitation of college athletes, particularly the black athlete, and with the scandals that have shaken college sports recently. "Addition of a 700 S.A.T. was simply to try to improve an otherwise tarnished image and to soothe their consciences," Mr. Stone said. "It just opened up Pandora's box and didn't really solve anything. It did not set higher admission standards for entering students, those who play in the band, or are in the dramatic club or debating club, and I think it raises legal questions of whether it discriminates against the athlete."

Those same questions were raised by Mary Frances Berry, a professor of history and law and a senior fellow in the Institute for the Study of Educational Policy at Howard University. Ms. Berry served in the Carter Administration as Assistant Secretary for education in the Department of Health, Education, and Welfare and before that had been provost of the University of Maryland and chancellor of the University of Colorado at Boulder.

Ms. Berry said in an interview that she had discussed the controversy with Mr. Jackson and some of the black-college presidents who have voiced concern over the new N.C.A.A. academic standards.

They do not solve the problems of athletics at Division I institutions, she said. "Athletics at these schools have become large business enterprises characterized by the lack of faculty control and exploitation of many student athletes," she said. "The N.C.A.A. rules, instead of addressing major problems of the treatment of playing athletes and of concern about their academic futures, applies a Band-Aid approach while sweeping the real problems under the rug."

WIDE WORLD

The Rev. Jesse Jackson opposes the N.C.A.A.'s new academic standards for athletes.

The N.C.A.A., in adopting new standards for freshmen's academic eligibility to participate in sports, is making a judgment about what is required to insure academic success that is better left to individual institutions, she said.

She pointed out that S.A.T. scores had risen nationally, primarily because of a rise in the scores of blacks. "All freshmen should be excluded from playing, if any are, and all student athletes should be treated like all other students, in admissions and in any other way," she said. "That is to say, if we believe they are students first and not cogs in a business machine."

Sole Black Member

Also critical of the N.C.A.A. eligibility standards is Luna I. Mishoe, president of Delaware State College and the sole black member of the American Council on Education's *ad hoc* committee on athletics. Mr. Mishoe said he had been appointed to the committee only a week before the convention, but that he intended to keep the position.

He opposes the new rules, he said, because "I do not believe that the N.C.A.A. actually has the prerogative to set up a curriculum for athletes, nor to require a test and a certain score on a test."

Mr. Mishoe said the withdrawal of black colleges from the N.C.A.A. would not solve the problem. "The way to do it is to stay in there and get legal answers to the questions we want," he said. "If the N.C.A.A. can stand up legally to this, that's one thing. If it can't, things will change. I envision we are going to have answers to the question of whether the N.C.A.A. has the authority to do this. We will get the answers from legal sources. We might have some changes in the rules as early as next year."

In the meantime, Mr. Mishoe said, the 277 Division I institutions should prepare for 1986. "We're going to get the word out to high schools in Delaware to get athletes into a core curriculum, get them to a point where they can pass that test, so in 1986, if this is the rule, we'll be ready," he said. "We still intend to play football at Delaware State."

Assistant Editor N. Scott Vance also contributed to this report.

How Average SAT Scores Differ by Race

	White students			Black students		
	Verbal	Math	Total	Verbal	Math	Total
1976	451	493	944	332	354	686
1977	448	469	937	330	357	687
1978	446	485	931	332	354	686
1979	444	483	927	330	358	688
1980	442	482	924	330	360	690
1981	442	483	925	332	362	694
1982	444	483	927	341	366	707

SOURCE: COLLEGE BOARD

Harry Edwards

Continued from Preceding Page

ten plays simply for the chance of turning professional, Mr. Edwards said.

"Exploitation began when the dollars came in the gate," he said. "That's when education went out the door.

"The sums of money involved, the pressure, the rewards—there is a tremendous amount at stake. College sport has become unwillingly involved in an athletic arms race—and there's no finish line. To compete, colleges need the big guns, the guys who can play, whether they have any place in an academic environment or not."

And more and more "the big gun"—the back who can be counted on for the touchdown run or the forward who can hit the long jump shot with seconds remaining—is black.

Pervasive myths suggest that black athletes are physically superior, but Mr. Edwards offers other social and cultural explanations for their athletic success. The black athlete is more visible than the black doctor or lawyer, he said, so black youths choose the athlete as a role model. And, because many American sports have few black players, most aspiring black athletes are channeled into a limited number of sports.

These factors contribute to a disproportionately high number of talented and motivated black athletes in college football and basketball, Mr. Edwards said. Also, from an early age, so little is required of them by their teachers that they demand little of themselves, academically, beyond maintaining their athletic eligibility.

The result is that 25 to 35 per cent of black high-school athletes who qualify for scholarships because of their ability in sports don't get them because of academic deficiencies, Mr. Edwards said.

Those who do make it to college often find themselves academically crippled because of the amount of time they have to devote to their sport, he continued. To play football in the N.C.A.A.'s Division I, a player must put in a minimum of 40 hours a week, not including travel, Mr. Edwards said, and basketball players devote at least 35 hours a week to their sport.

He noted that federal work-study regulations limit students to 20 hours of employment a week. Anything more is considered an encroachment on the time they need for their studies.

Adding to the athlete's dilemma are a perpetual state of fatigue, frequent injuries, and the pressure to perform well. It is easy to see why many athletes perform dismally, if at all, in the classroom, Mr. Edwards said.

"Education is activist. You have to be actively involved in your own education. When you're involved in sports 50 hours a week, maybe living in pain, you can't be actively involved."

As college coaches feel more pressure to win, and as the rewards for winning become greater, exploitation of athletes will mount, Mr. Edwards said. Athletic-rules violations, such as doctored transcripts and payments to players, are being discovered more frequently as institutions compete for the rights to particular players, with little regard for their academic needs beyond keeping them eligible to compete.

"I was an athlete myself," said Mr. Edwards. "I had the good fortune of being in the first generation of athletes to go to an integrated school in East St. Louis [Ill.] in 1957. It was a relatively new experience to have blacks in the school. The subtleties of racism in sport were not nearly as developed as they are now. As a result, I got a straight shot to the chops."

Inequities Became Clear

His encounters with racism led him to conclude that the American notion of athletics as a way to racial equality was contradictory to the actual treatment blacks received, he said.

As he moved on to San Jose State University on a basketball scholarship, the inequities became clearer. "The higher up you got, the discrimination, the racism, the exploitation of black athletes didn't lessen," he said. "It became more intense."

Unusual rules governed the lives of black athletes. "I had to petition to get into sociology as a major," he said. "The tradition was for all black athletes to go into physical education."

The study of sociology and its relation to sports helped him "understand I was not dealing with bad individuals, or corrupt individuals," Mr. Edwards said. "I was dealing with a

UPI

In 1968 Harry Edwards, at left above with H. Rap Brown, organized boycotts against several sports events.

cently in the fall issue of *Wisconsin Natural Resources*, a magazine published by the Wisconsin Department of Natural Resources.

Theologian Denied Tenure Settles with Fordham

Fordham University has agreed to a cash settlement with a Protestant theologian who accused the university of denying him tenure because of his religion.

The agreement was announced by Isaiah Robinson, Jr., chairman of the New York City Human Rights Commission, who said the amount of the settlement would not be disclosed.

George H. Kuykendell, who is now a pastor in Collingswood, N.J., applied for tenure at Fordham, a Jesuit institution, in 1978, at a time when more than 60 per cent of the members of the theology department were tenured. The department's faculty approved his application, but it was later rejected by a review committee.

Fordham denied any wrongdoing.

Suit Would Halt Spending on New Arkansas Programs

A suit filed in federal court against the University of Arkansas system asks that spending on new programs be suspended until the system's predominately black Pine Bluff campus receives equal treatment.

John W. Walker, a lawyer who filed the suit in federal district court on behalf of a student at Pine Bluff student and an alumnus, said vestiges of discrimination remained at the campus in the form of substandard buildings and educational programs.

"It is our contention the state should not provide money to white institutions until the basic program and physical needs of historically black colleges are addressed," Mr. Walker said.

The Pine Bluff campus, formerly known as Arkansas AM&N, merged with the university system in 1972.

$300-Million 'New Town' Planned at N.C. Campus

The Foundation of the University of North Carolina at Charlotte has announced plans for a $300-million "new town" adjacent to the campus and its research park. To be known as University Place, the town will be developed by the Carley Capital Group of Washington, D.C., and Madison, Wis. David Carley, a partner in the development company, is former president of the Medical College of Wisconsin and of the National Association of Public Television Stations.

Notes

· Bradford College will offer at least five full scholarships next fall to students whose parents are unemployed. President Arthur Levine said, "Federal financial-aid cuts make it essential for colleges and universities to take the lead in this endeavor." . . . A federal jury has ruled that Tuskegee Institute did not discriminate against Zbigniew W. Dybczak when it removed him as dean of the engineering department in July, 1981. Mr. Dybczak claimed he had been dismissed because he is white and Polish.

FIRE GUTS DORMITORY AT WILLIAM AND MARY

WIDE WORLD

WILLIAMSBURG, VA.

An early morning blaze ravaged a freshman dormitory at the College of William and Mary last week, forcing 184 students out into the cold.

Elaine Justice, director of public information, said the fire at Jefferson Hall broke out about 1 a.m., setting off smoke detectors that roused the students. No injuries were reported, she said.

About half the dorm was completely gutted, Ms. Justice said, adding that an attempt will be made to save the shell of the building.

She estimated the damage at $3-million. The cause of the fire was not immediately known.

Students who live in the dormitory were put in a local motel temporarily, Ms. Justice said.

Space for about 80 of the students is available on the campus, she said, and the college has asked local families and apartment owners to provide living quarters for the displaced students.

Controversial President Resigns at U. of Albuquerque

ALBUQUERQUE, N.M.

Frank W. Welch, the controversial president of the University of Albuquerque here, has resigned following more than a year of conflict with faculty members.

His resignation came at a time when the Sisters of St. Francis, the Roman Catholic order that established and owns the 2,000-student university, was seeking to sell it. Sister Stephanie McReynolds, vicar provincial of the order, said a change of ownership was expected to take place this year.

The order sought for several years to sell the financially troubled institution to a lay organization, but a sales agreement with the institution's board of trustees was rejected by Vatican officials on grounds that Catholic properties should remain within the church.

Mr. Welch, who announced his resignation this month shortly after the order and the board of trustees were informed of the Vatican's decision, said he quit because he believed that if the 63-year-old university was to remain under church control, the president should be a Catholic. He said he took the post with the understanding that the order planned to transfer ownership to a lay organization.

However, John Lucas, president of the faculty senate and an assistant professor of philosophy, said many professors believed leaders of the order had used their influence to force Mr. Welch's resignation. Sister Stephanie, who is a member of the board of trustees, refused to comment on the order's role in Mr. Welch's departure.

Faculty members have accused Mr. Welch of firing four professors without due process, violating employment contracts, reorganizing the curriculum and department programs over faculty objections, and rewriting general-education requirements without consulting the faculty.

Mr. Welch received a vote of no confidence from the faculty senate last May after he eliminated 10 of the university's 80 faculty positions. The debate spread to the University of New Mexico where students and faculty members sympathetic to their colleagues at Albuquerque circulated petitions calling for Mr. Welch's removal.

Forty-four Albuquerque professors requested an investigation of the president by the American Association of University Professors.

Last April 19 faculty members sued the university for breach of contract. They charged that Mr. Welch had increased teaching loads from 12 to 15 hours per semester without faculty consultation.

Mr. Welch said last week that his actions had been opposed by only a small group of professors and that when he took office there had been "no role for the president, administration, and trustees" in running the university.

He said faculty members had been consulted adequately and that "there is more actual involvement of the total faculty now than ever before."

Since his arrival, Mr. Welch also said, he has eliminated deficits that were running $250,000 a year and erased university debts totaling about $600,000. However, Mr. Lucas of the faculty senate said the university had been put on a sound financial footing by a $500,000 fund-raising campaign that took place before Mr. Welch arrived.

—JACK McCURDY

Correction

In ratings of doctoral programs in geography, which appeared in *The Chronicle*, January 19, those for Indiana University were incorrectly reported and those for Indiana State University were inadvertently omitted. The ratings, based on a survey by the Conference Board of Associated Research Councils, are on a standardized scale on which 50 represents the average score for all rated departments. The correct scores:

	Faculty quality	Effective-ness	Improve-ment	Famil-iarity
Indiana U.	52	54	59	52
Indiana St. U.	37	36	51	35

Notes on . . .
Community Colleges

When Long Beach City College decided to calculate its economic impact on the local community, it came up with some impressive figures.

According to a study by William N. Littlefield, a professor of economics at the college, it provided about $88.9-million in personal income to local residents and $43-million in sales for local retailers during 1980-81. It also provided more than 860 jobs that would not otherwise have been available in the community.

For its part, the community provided $4.7-million from local revenues to help support the college.

On the basis of those and other figures, which came from the college's payroll data, Mr. Littlefield concluded that for each dollar Long Beach City College received from the community, it returned $19 in personal income. Also, he said, each dollar from the community was directly or indirectly responsible for $9 in local retail sales.

■

Under a new contract with the Small Business Administration, the American Association of Community and Junior Colleges is developing a series of noncredit courses in small-business management that can be offered by two-year colleges.

The nine courses, which will be designed for people who want to start a small business or who already own one, will cover planning, financial management, recordkeeping, sales and marketing, purchasing and cost control, business law, and risk management, among other topics.

Carol Eliason, director of the association's National Small Business Training Network, which is developing the courses, says one thing that most colleges forget to teach is that "managing a small business is completely different from managing a big one, and the difference can get the owner or manager into a great deal of trouble." She says the design for the new courses will begin with that premise.

■

The League for Innovation in the Community College, a consortium of institutions dedicated to experimental education, has decided to take stock of itself now that it is 15 years old.

According to a recent study, the national organization includes 55 institutions in 18 community-college districts. Membership is by invitation from the board of directors, which has deliberately limited the size of the consortium to keep it from becoming bureaucratic. The member colleges have a total of 25,000 administrators and faculty and staff members. They enroll 850,000 students.

Since it was founded in 1968, the league's projects have been designed to encourage new ways of managing a college, teaching a course, or helping students and faculty members acquire a broader perspective on current issues. In the 1970's, for example, its activities often focused on energy issues. During the 1980's, the consortium is working on alliances between the colleges and business.

—BEVERLY T. WATKINS

CHRONICLE SURVEY

College Tuition Rates Expected to Continue Rising, but at Slower Pace

By JACK MAGARRELL

The rise in college tuition rates is expected to continue over the next two years, but at a slower pace.

A survey for *The Chronicle* of tuition projections at a national sample of 300 colleges and universities found that average increases projected at every type of institution were smaller for academic 1983-84 than for 1982-83, and even smaller for 1984-85. Unanticipated changes in financial conditions, of course, could alter current projections.

The average tuition rate at public institutions for the current academic year is $611, according to the survey—9.9. per cent more than last year's average. Tuition at public institutions is expected to go up by 7.9 per cent to an average of $659 next year and by 6.6. per cent to $702 in 1984-85.

At private institutions, this year's average tuition is $4,102, a one-year increase of 12.8 per cent, the survey shows. For next year, the projected average is $4,479, an increase of 9.2 per cent, and for 1984-85 it is $4,837, an increase of 8.0 per cent.

Most colleges and universities have not yet officially set tuition rates for next year. At public institutions in many states, the size of the tuition increase will depend on the level of appropriations, which will be decided by the legislatures in the next few months.

Prominent examples of institutions whose tuition will rise more slowly in the future are Princeton and Stanford Universities.

"The reduction in the general rate of inflation in the national economy, particularly in energy prices, has been especially important this year," said Princeton's provost, Neil L. Rudenstine. "One result of that change is that we have been able to begin to moderate the rate of increase in student charges from the level of the last two years."

Princeton's total charge to students—including board and room as well as tuition—was boosted 14.7 per cent last year, from $9,994 in 1981-82 to $11,468 in 1982-83.

Princeton officials have recommended increasing the charge for 1983-84 by 12.5 per cent, to $12,900.

Stanford trustees will be asked next month to approve a smaller increase than university officials had originally planned. Tuition alone, without board and room, is $8,200 at Stanford this year, an increase of 15.1 per cent over last year. The university's earlier projections, which were based on a long-term forecast predicting a 6-per-cent inflation rate, call for an increase of 12 per cent for 1983-84.

Because of changing economic conditions, Donald Kennedy, Stanford's president, said the actual increase could be "substantially lower."

The Chronicle Survey's data on current and projected tuition rates were obtained from a stratified random sample of 150 public and 150 private institutions. The survey was designed and conducted for *The Chronicle* by John Minter Associates, a research organization in Boulder, Colo., specializing in higher-education studies.

Current and Projected Tuition Rates

	1982-83					1983-84					1984-85				
	Average tuition	1-year increase (a)	Average increase (b)	High (c)	Low (d)	Average tuition	1-year increase (a)	Average increase (b)	High (c)	Low (d)	Average tuition	1-year increase (a)	Average increase (b)	High (c)	Low (d)
Public															
Ph.D.-granting universities	$1,007	12.5%	12.7%	17.8%	7.6%	$1,096	8.9%	8.8%	12.5%	5.1%	$1,182	7.8%	7.9%	9.5%	6.4%
Other 4-year institutions	813	10.8%	11.4%	16.4%	6.4%	893	9.8%	9.6%	15.4%	3.9%	970	8.7%	8.1%	12.2%	3.9%
All 4-year institutions	862	11.3%	11.7%	16.7%	6.7%	944	9.5%	9.0%	14.7%	4.2%	1,024	8.4%	8.0%	11.6%	4.5%
2-year colleges	480	8.6%	8.8%	17.3%	0.2%	511	6.4%	7.3%	11.8%	1.5%	535	4.8%	4.8%	10.2%	0.2%
All institutions	611	9.9%	9.8%	17.1%	2.4%	659	7.9%	7.6%	12.8%	2.4%	702	6.6%	6.2%	10.7%	1.7%
Private															
Comprehensive institutions (e)	$4,483	13.2%	12.8%	15.3%	10.2%	$4,917	9.7%	9.6%	11.3%	7.9%	$5,357	8.9%	8.8%	10.3%	7.3%
Liberal-arts colleges															
Selective	6,548	13.6%	13.6%	16.4%	10.9%	7,184	9.7%	9.6%	11.6%	7.9%	7,779	8.3%	8.4%	9.7%	7.0%
Less selective	3,778	11.9%	11.7%	15.3%	8.1%	4,099	8.5%	9.0%	11.9%	6.2%	4,376	6.8%	6.8%	9.4%	4.1%
All private 4-year institutions	4,519	13.1%	12.6%	15.5%	9.7%	4,943	9.4%	9.5%	11.7%	7.3%	5,348	8.2%	7.9%	9.9%	6.0%
2-year colleges	2,563	11.5%	11.9%	16.4%	7.5%	2,761	7.8%	7.8%	11.0%	4.4%	2,949	6.8%	7.3%	10.0%	4.1%
All private institutions	4,102	12.8%	12.5%	15.7%	9.2%	4,479	9.2%	9.1%	11.6%	6.7%	4,837	8.0%	7.8%	9.9%	5.6%

Total student costs †

	1982-83					1983-84					1984-85				
	Average	1-year increase (a)	Average increase (b)	High (c)	Low (d)	Average	1-year increase (a)	Average increase (b)	High (c)	Low (d)	Average	1-year increase (a)	Average increase (b)	High (c)	Low (d)
Public 4-year institutions	$3,720	6.8%	7.6%	11.8%	3.4%	$3,955	6.3%	5.9%	9.0%	2.7%	$4,221	6.8%	6.3%	8.6%	4.0%
Private 4-year institutions	7,382	11.9%	11.4%	14.9%	7.9%	8,077	9.4%	9.4%	12.7%	6.1%	8,760	8.4%	8.2%	10.4%	6.1%

(a) Increase of the average amount over the average for the previous year.
(b) Average of the percentage increases reported.
(c) About one-fifth of the increases were higher than the "high" percentage (mean increase plus one mean deviation).
(d) About one-fifth of the increases were lower than the "low" percentage (mean increase minus one mean deviation).
(e) Institutions with more than 1,500 students, a liberal-arts program, and at least one professional program.
† Includes tuition and fees, board and room, books and supplies, transportation, and personal expenses.

Note: Survey data are based on responses from a stratified random sample of 150 private institutions and 150 public institutions. The response rates were 63 per cent for private institutions and 55 per cent for public institutions. Figures for 1982-83 are based on actual current rates; figures for the two following academic years are based on projections by the institutions reporting. Data for "all 4-year institutions" and "all institutions" are weighted according to the distribution of institutions by type. Technical inquiries about the survey design and sampling techniques should be addressed to John Minter Associates, P.O. Box 107, Boulder, Colo. 80306.

SOURCE: SURVEY FOR THE CHRONICLE BY JOHN MINTER ASSOCIATES

Panel Doubts Private Services' Claims that Large Amounts of Aid Go Unused

SACRAMENTO, CAL.

Responding to the proliferation of computerized services that claim to help students find private sources of financial aid, the California Student Aid Commission released a report last week that raises questions about the accuracy and usefulness of the information provided by such companies.

The claim by many computerized scholarship services that large amounts of financial aid go unused "could not be documented," said Arthur S. Marmaduke, director of the student-aid commission, which administers state and federal aid programs in California.

At a time when government grants and loans have been curtailed, the commission has seen a surge of interest in the services provided by companies that promise to help locate less-well-known sources of private aid. For a fee, the companies match information about a student's background and interests with the criteria applied by private organizations in awarding aid. They then provide the customer with a list of potential donors.

Although some college officials see the computer services as potentially helpful in saving students time and trouble in finding additional funds, others have complained that students could get the same information free from reference books and their campus financial-aid advisers. In a lawsuit now pending in a state court, New York City's Department of Consumer Affairs has accused one of the oldest computer-matching companies, Scholarship Search, of misleading consumers in its advertising and failing to make good on its claims.

The burgeoning search industry has been under study for more than a year by an *ad hoc* committee of the California commission. Based on a survey of 45 computer-matching companies and a review of scholarship listings provided to selected high-school students, the committee concluded in its report that the quality of the services varied widely and that the companies did not consistently live up to their claims.

In many cases, advertisements promoting the services assert that more than $100-million in financial aid goes unused each year.

But, in releasing his commission's report, Mr. Marmaduke said that "the popular impression that large amounts of aid go 'unclaimed' each year could not be documented by the commission."

"Clearly there is some unclaimed student assistance," he said. "But our experience with California colleges suggests that the amount of unused student aid is infinitesimally small."

Mary Ann Maxin, executive director of Scholarship Search, said she stood by her company's claim that over $135-million in aid has gone unclaimed, although she acknowledged it was only an estimate. If anything, Ms. Maxin contended, the figure understates the amount of aid that goes unused.

The California panel's report also concluded that "there appears to be little matching of students and aid resources." For example, it said, one student who received scholarship listings from a computer service was not eligible for aid from 11 of the 18 sources cited.

However, the committee found that all the companies surveyed promised refunds to students who were not eligible for aid from a specified number of the sources whose names they received.

In cases where students did receive aid from the sources provided by the computer services, Mr. Marmaduke said, "we observed that this was aid that would not have otherwise been received."

Of the 27 companies that responded to the commission's survey, 19 have been established within the past 3 years and only 4 maintain their own files on sources of aid, the report said.

Sixteen of the other services used files supplied by Academic Guidance Services, a company based in Marlton, N.J.

Although the copyright of A.G.S. appears on the forms supplied by companies using its files, the report said, "it is not obvious to the uninformed consumer which organizations are using the same data base."

Ed Rosenwasser, president of Student College Aid in Houston, justified his company's use of the A.G.S. files, saying, "They do a better job of updating the data base than I could."

Mr. Rosenwasser acknowledged that processing errors did sometimes result in students' receiving listings for scholarships for which they are not eligible. But he said that only 6 per cent of his customers had received refunds under his policy of returning fees to those who do not receive at least five suitable listings.

—JANET HOOK

Freshmen Aim to Make Money, but Shift Slightly to Left Politically

LOS ANGELES

More college freshmen have their sights fixed on making big money, while fewer indicate concern for the problems of society, a national survey comparing this year's new students with last year's has found.

There was a slight shift to the left in the students' political alignment.

While about three-fifths of the freshmen consider themselves in the middle of the road politically, the proportion classifying themselves as liberal or on the far left increased from 19.7 per cent last year to 20.7 per cent this year, and the proportion who said they were conservative or on the far right declined from 20.7 per cent to 19.4 per cent.

Support for increased spending for national defense was indicated by 38.8 per cent of the freshmen this year. The survey did not ask about defense spending in previous years.

This year's freshmen showed increased support for taxing the rich—72.1 per cent this year, compared with 71 per cent last year.

Freshman support for legalization of marijuana dropped in the past year from 34 per cent to 29.4 per cent. Preferential treatment of disadvantaged students in college admissions was backed by 35.5 per cent of the freshmen this year, compared with 37.2 per cent last year.

The survey of freshman characteristics and attitudes is conducted each fall for the American Council on Education and the University of California at Los Angeles by Alexander W. Astin, a professor of education at U.C.L.A.

Data for the survey were gathered from 188,692 freshmen entering 350 colleges and universities in the fall of 1982.

The students' responses were adjusted statistically to represent the total of about 1.74 million freshmen on American campuses this year.

"Being very well-off financially" was endorsed as "very important" goal by 68.9 per cent of this year's freshmen, compared with 65.2 per cent last year and 43.5 per cent in 1967.

Being able to make more money was rated as a "very important" reason for going to college by 69.8 per cent, compared with 67 per cent last year and 49.9 per cent in 1967.

The proportion of freshmen endorsing the goal of helping promote racial understanding declined from 35.8 per cent in 1977-78 to 31 per cent in 1981-82 and to 30.7 per cent in 1982-83. The goal of "helping others in difficulty" was endorsed by 61.6. per cent this year, compared with 62.9 per cent last year and 66 per cent in 1975

The goal of participating in programs to clean up the environment was endorsed by 44.6 per cent of the freshmen in 1972, but that support dwindled to 24.8 per cent last year and 22.9 per cent this year.

"Developing a meaningful philosophy of life" continued its decline as a goal of college freshmen. Cited by 82.9 per cent in 1967, it was endorsed by 49 per cent last year and 46.7 per cent this year.

This year's freshmen have shown increasing interest in careers in business, engineering, and computer fields. Interest has declined in college teaching, scientific research, and social work, according to the survey.

Copies of the survey report, *The American Freshman: National Norms for Fall, 1982*, are available for $7.50 each from the Cooperative Institutional Research Program, Graduate School of Education, 405 Hilgard Avenue, University of California, Los Angeles 90024.

—JACK MAGARRELL

College to Equip All Dorm Rooms with Terminals

LINCOLN, NEB.

A computer terminal in every dormitory room is planned by Union College here.

College officials have approved spending $400,000 to buy 500 terminals for installation by next fall.

Dean Hubbard, president of Union, said the college would pay for the additional terminals with money from gifts, from the sale of computer time to others, and from a tuition increase of $50 per semester.

The college already has 100 terminals for student use—one for every 10 students on the campus.

The 500 new terminals, one for each dormitory room, will be connected directly to the college's central computer. From 70 to 100 of the terminals can be used at the same time.

Benefits for Faculty

Mr. Hubbard said the expansion of the college's computer system would permit greater use by faculty members. The college already pays a share of the cost of computer terminals in faculty members' homes, for those who want them.

The college may make home terminals available free to faculty members who reach a certain level of proficiency, the president said.

Beginning next fall, each student will be required to take a computer-literacy course or pass a test to demonstrate that they are familiar with computer systems.

Printers on Every Floor

Students taking English courses will be able to write their papers on the dorm-room terminals. A gift to the college has provided funds for printers on each floor to give students a copy of their computer work.

Instructors in home economics already are making assignments requiring computer use and the college's music division is exploring computer applications in that field, Mr. Hubbard said.

Eventually, he said, students in their dormitory rooms will be able to search a computerized catalogue of the college library's holdings.

Union, a Seventh-day Adventist college, provides computer services for Bellevue and York Colleges, the Lincoln School of Commerce, and Seventh-day Adventist offices in nine states, Mr. Hubbard said.

—JACK KENNEDY

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FACT–FILE

Freshman Characteristics and Attitudes

A national profile based on responses of 188,000 students who entered college in the fall of 1982

Characteristics

Age by December 31, 1982:	
16 or younger	0.1%
17	2.5%
18	74.2%
19	18.9%
20	1.8%
21	1.3%
22	0.6%
23-25	0.4%
26-29	0.1%
30 or older	0.0%

Racial background:	
White	88.2%
Black	8.5%
American Indian	1.0%
Oriental	1.4%
Mexican	0.9%
Puerto Rican	0.9%
Other	1.4%

Average grade in high school:	
A or A+	9.6%
A−	11.4%
B+	19.3%
B	26.5%
B−	13.9%
C+	12.0%
C	7.1%
D	0.4%

Academic rank in high school:	
Top 20%	39.6%
Second 20%	23.2%
Middle 20%	30.6%
Fourth 20%	5.8%
Lowest 20%	0.9%

Year of high-school graduation:	
1982	94.0%
1981	2.8%
1980	0.8%
1979 or earlier	1.5%
H. S. equivalency (G. E. D. test)	0.7%
Never completed high school	0.2%

Marital status:	
Not presently married	98.8%
Married, living with spouse	0.9%
Married, not living with spouse	0.3%

Veteran:	
No	98.7%
Yes	1.3%

Have had remedial work in:	
English	5.3%
Reading	5.1%
Mathematics	7.6%
Social studies	3.9%
Science	3.9%
Foreign language	3.3%

Will need remedial work in:	
English	11.3%
Reading	4.4%
Mathematics	22.1%
Social studies	2.6%
Science	9.3%
Foreign language	7.5%

Disabled:	
No	94.6%
Yes	5.4%

Type of disability:	
Hearing	8.7%
Speech	1.9%
Visual	45.8%
Orthopedic	13.1%
Learning	6.0%
Health-related	10.7%
Other	7.1%

Does handicap require architectural changes?	
No	98.1%
Yes	1.9%

Residence planned during fall term:	
With parents, relatives	33.1%
Other private home or apartment	5.8%
College dormitory	58.2%
Fraternity/sorority house	0.5%
Other campus housing	1.4%
Other	0.9%

Residence preferred during fall term:	
With parents or relatives	19.4%
Other private home or apartment	25.8%
College dormitory	43.8%
Fraternity/sorority house	5.0%
Other campus housing	3.8%
Other	2.2%

Current religious preference:	
Jewish	3.0%
Protestant	33.7%
Roman Catholic	38.9%
Other	17.2%
None	7.3%

Father's religious preference:	
Jewish	3.5%
Protestant	35.8%
Roman Catholic	37.8%
Other	16.5%
None	6.5%

Father's occupation:	
Artist (incl. performer)	0.9%
Businessman	29.6%
Member of clergy or religious worker	1.0%
Engineer	9.0%
Farmer or forester	3.9%
Lawyer	1.6%
Military man	1.8%
Physician or dentist	2.2%
Other health professional	1.4%
Research scientist	0.6%
Teacher or administrator, college	1.0%
Teacher or administrator, elementary	0.6%
Teacher or administrator, secondary	3.5%
Worker, skilled	11.1%
Worker, semiskilled	5.0%
Worker, unskilled	3.3%
Other occupation	21.4%
Unemployed	2.1%

Father's education:	
Grammar school or less	4.5%
Some high school	10.0%
High-school diploma	29.6%
Postsecondary other than college	4.6%
Some college	13.4%
College degree	20.1%
Some graduate school	2.3%
Graduate degree	15.4%

Mother's religious preference:	
Jewish	3.3%
Protestant	36.5%
Roman Catholic	39.4%
Other	17.2%
None	3.5%

Mother's occupation:	
Artist (incl. performer)	1.4%
Businesswoman	10.1%
Member of clergy or religious worker	0.1%
Clerical worker	11.5%
Engineer	0.1%
Farmer or forester	0.4%
Homemaker (full time)	22.8%
Lawyer	0.1%
Nurse	7.7%
Physician or dentist	0.3%
Other health professional	1.8%
Research scientist	0.1%
Social, welfare, or recreation worker	1.2%
Teacher or administrator, college	0.3%
Teacher or administrator, elementary	5.9%
Teacher or administrator, secondary	3.3%
Worker, skilled	2.01%
Worker, semiskilled	3.5%
Worker, unskilled	2.4%
Other occupation	17.2%
Unemployed	8.0%

Mother's education:	
Grammar school or less	3.0%
Some high school	8.0%
High-school diploma	41.2%
Postsecondary other than college	7.3%
Some college	14.6%
College degree	17.0%
Some graduate school	2.1%
Graduate degree	6.8%

Twin status	
No	98.2%
Yes, identical	0.6%
Yes, fraternal	1.2%

Students estimate chances are very good that they will:	
Change major field	11.9%
Change career choice	11.0%
Fail one or more courses	1.4%
Graduate with honors	11.8%
Be elected to student office	2.8%
Get a job to pay college expenses	39.1%
Work full time while attending college	3.2%
Join a social fraternity or sorority	16.1%
Live in a coeducational dormitory	28.2%
Play football or basketball	4.6%
Be elected to an honor society	6.7%
Make at least a B average	41.3%
Need extra time to complete degree	5.2%
Need tutoring in some courses	9.4%
Work at outside job	21.3%
Seek vocational counseling	5.6%
Seek individual counseling	3.6%
Get a bachelor's degree	65.0%
Participate in student protests	4.1%
Drop out temporarily	1.1%
Drop out permanently	0.8%
Transfer to another college	10.5%
Be satisfied with college	55.4%
Find employment in preferred field	69.6%
Marry while in college	4.8%
Marry within a year after college	16.6%

Number of other colleges applied to for admission this year:	
None	38.6%
One	16.7%
Two	16.7%
Three	13.6%
Four	6.8%
Five	3.7%
Six or more	3.9%

Number of other college acceptances this year:	
None	45.0%
One	19.9%
Two	16.7%
Three	10.6%
Four	4.5%
Five	1.8%
Six or more	1.5%

College attended is student's:	
First choice	73.6%
Second choice	19.9%
Third choice	4.4%
Other	2.1%

Distance from home to college:	
5 miles or less	9.7%
6-10 miles	10.8%
11-50 miles	25.6%
51-100 miles	16.3%
101-500 miles	29.6%
More than 500 miles	7.9%

Reasons noted as very important in deciding to go to college:	
Parents' wishes	33.1%
Could not find job	7.4%
Wanted to get away from home	10.1%
To be able to get a better job	77.9%
To gain general education	66.2%
To improve reading and study skills	39.5%
Nothing better to do	2.3%
To become a more cultured person	33.8%
To be able to make more money	69.8%
To learn more about things	72.5%
To meet new, interesting people	54.6%
To prepare for graduate school	45.4%

Reasons noted as very important in selecting college attended:	
Relatives' wishes	6.6%
Teacher's advice	4.0%
Good academic reputation	53.5%
Offered financial assistance	16.7%
Not accepted anywhere else	2.7%
Advice of former student	14.9%
Offers special programs	25.5%
Low tuition	20.6%
Advice of guidance counselor	7.7%
Wanted to live at home	11.1%
Friend's suggestion	7.2%
Recruited by college	4.3%

Highest degree planned at college attended:	
None	4.0%
Associate (or equiv.)	28.5%
Bachelor's	50.7%
Master's	10.7%
Ph.D. or Ed.D.	1.5%
M.D., D.O., D.D.S., or D.V.M.	1.5%
LL.B. or J.D.	1.0%
B.D. or M.Div.	0.3%
Other	1.7%

Highest degree planned anywhere:	
None	1.9%
Associate (or equiv.)	8.3%
Bachelor's	38.3%
Master's	30.5%
Ph.D. or Ed.D.	8.2%
M.D., D.O., D.D.S., or D.V.M.	6.0%
LL.B. or J.D.	4.3%
B.D. or M.Div.	0.5%
Other	2.1%

Probable field of study:	
Accounting	6.2%
Aeronautical engineering	1.2%
Agriculture	1.9%
Anthropology	0.1%
Architecture, urban planning	0.9%
Art, fine and applied	2.1%
Arts and humanities (misc.)	0.6%
Astronomy	0.1%
Atmospheric science	0.1%
Biochemistry or biophysics	0.5%
Biological sciences (misc.)	0.6%
Biology (general)	1.5%
Botany	0.1%
Building trades	0.3%
Business (misc.)	1.2%
Business administration (general)	7.1%
Business education	0.2%
Chemical engineering	1.2%
Chemistry	0.8%
Civil engineering	0.9%
Communications	2.1%
Computer science	4.4%
Data processing, computer programming	4.0%
Drafting or design	0.6%
Earth science	0.3%
Economics	0.4%
Education (misc.)	0.4%
Electrical or electronic engineering	4.0%
Electronics	0.9%
Elementary education	2.3%
Engineering (misc.)	2.3%
English	0.8%
Ethnic studies	0.0%
Finance	0.9%
Foreign language	0.5%
Geography	0.0%
Health technology	1.5%
History	0.5%
Home economics	0.4%
Industrial engineering	0.5%
Forestry	0.7%
Journalism	1.5%
Law enforcement	1.5%
Library science	0.0%
Management	4.4%
Marine science	0.1%
Marine-life science	0.3%
Marketing	1.9%
Mathematics	0.6%
Mechanical engineering	2.5%
Mechanics	0.5%

Probable field of study (Continued):	
Microbiology or bacteriology	0.3%
Military science	0.1%
Music	1.1%
Music or art education	0.3%
Nursing	4.0%
Pharmacy	0.4%
Philosophy	0.1%
Physical education	1.2%
Physical sciences (misc.)	0.2%
Physics	0.3%
Political science	1.9%
Pre-dental, pre-medical, pre-veterinary	3.1%
Professional (misc.)	1.3%
Psychology	2.1%
Secondary education	0.6%
Secretarial studies	2.5%
Social work	0.9%
Social sciences (misc.)	0.2%
Sociology	0.2%
Special education	1.0%
Speech	0.1%
Statistics	0.0%
Theater and drama	0.7%
Theology and religion	0.2%
Therapy	1.7%
Women's studies	0.0%
Zoology	0.4%
Other fields	1.2%
Other technical fields	0.6%
Undecided	4.6%

Probable career occupation:	
Accountant or actuary	5.8%
Actor or entertainer	0.9%
Architect or urban planner	1.4%
Artist	1.7%
Business (clerical)	1.9%
Business executive	10.5%
Business proprietor	2.7%
Business salesperson or buyer	1.2%
Clergy (minister or priest)	0.2%
Clergy (misc.)	0.1%
Clinical psychologist	0.9%
Computer programmer or analyst	8.8%
Conservationist or forester	0.9%
Dentist	0.7%
Dietitian or home economist	0.3%
Educator (college)	0.2%
Educator (elementary)	3.0%
Educator (secondary)	1.7%
Engineer	12.0%
Farmer or rancher	1.2%
Foreign-service worker	0.5%
Homemaker (full time)	0.1%
Interior decorator	0.5%
Interpreter	0.2%
Journalist or writer	2.1%
Lab technician or hygienist	1.3%
Law-enforcement officer	1.2%
Lawyer or judge	4.3%
Military person	0.9%
Musician	1.1%
Nurse	4.0%
Optometrist	0.2%
Pharmacist	0.4%
Physician	3.6%
Research scientist	1.5%
School counselor	0.2%
School principal or superintendent	0.0%
Social, welfare, or recreation worker	1.1%
Statistician	0.1%
Therapist	2.0%
Veterinarian	1.2%
Skilled trades	1.6%
Other occupation	6.6%
Undecided	9.51%

Estimated parental income:	
Less than $4,000	2.9%
$4,000-$5,999	2.2%
$6,000-$7,999	2.4%
$8,000-$9,999	2.9%
$10,000-$12,499	5.2%
$12,500-$14,999	5.0%
$15,000-$19,999	9.1%
$20,000-$24,999	13.2%
$25,000-$29,999	11.5%
$30,000-$34,999	12.0%

Continued on Following Page

FACT-FILE—Continued

Estimated parental income (Continued):	
$35,000-$39,999	8.5%
$40,000-$49,999	10.6%
$50,000-$99,999	11.3%
$100,000 or more	3.3%

Number of parents' dependents:	
One	5.8%
Two	10.7%
Three	21.2%
Four	27.4%
Five	20.4%
Six or more	14.5%

Number of other dependents currently attending college:	
None	65.4%
One	25.0%
Two	6.8%
Three or more	2.9%

Concern about financing college:	
None	31.6%
Some	51.2%
Much	17.2%

Support from parental aid:	
None	28.2%
$1-$499	16.8%
$500-$999	10.2%
$1,000-$1,499	8.0%
$1,500-$2,000	7.8%
Over $2,000	29.0%

Support from spouse:	
None	99.2%
$1-$499	0.4%
$500-$999	0.1%
$1,000-$1,499	0.1%
$1,500-$2,000	0.0%

Support from spouse (Continued):	
Over $2,000	0.2%

Support from Pell Grant:	
None	76.8%
$1-$499	7.4%
$500-$999	6.4%
$1,000-$1,499	4.7%
$1,500-$2,000	2.9%
Over $2,000	1.9%

Pell Grant:	
Heard of the program	57.7%
Applied for aid	38.1%
Qualified for aid	23.5%

Support from Supplemental Educational Opportunity Grant:	
None	94.3%
$1-$499	2.5%
$500-$999	1.6%
$1,000-$1,499	0.9%
$1,500-$2,000	0.4%
Over $2,000	0.2%

Support from state scholarship or grant:	
None	85.6%
$1-$499	6.9%
$500-$999	4.0%
$1,000-$1,499	2.0%
$1,500-$2,000	0.8%
Over $2,000	0.7%

Support from college grant:	
None	88.1%
$1-$499	3.6%
$500-$999	2.8%
$1,000-$1,499	2.0%
$1,500-$2,000	1.1%

Support from college grant (Continued):	
Over $2,000	2.4%

Support from College Work-Study grant:	
None	88.2%
$1-$499	4.5%
$500-$999	4.4%
$1,000-$1,499	2.3%
$1,500-$2,000	0.5%
Over $2,000	0.2%

Support from personal GI benefits:	
None	99.4%
$1-$499	0.2%
$500-$999	0.1%
$1,000-$1,499	0.1%
$1,500-$2,000	0.1%
Over $2,000	0.2%

Support from parent's GI benefits:	
None	99.2%
$1-$499	0.3%
$500-$999	0.1%
$1,000-$1,499	0.1%
$1,500-$2,000	0.1%
Over $2,000	0.2%

Support from other private grants:	
None	92.7%
$1-$499	3.3%
$500-$999	1.8%
$1,000-$1,499	1.1%
$1,500-$2,000	0.5%
Over $2,000	0.7%

Support from full-time employment:	
None	98.1%
$1-$499	0.8%
$500-$999	0.5%

Support from full-time employment (Continued):	
$1,000-$1,499	0.2%
$1,500-$2,000	0.1%
Over $2,000	0.2%

Support from part-time employment:	
None	76.3%
$1-$499	15.6%
$500-$999	5.3%
$1,000-$1,499	1.7%
$1,500-$2,000	0.5%
Over $2,000	0.6%

Support from summer work:	
None	58.7%
$1-$499	19.8%
$500-$999	11.6%
$1,000-$1,499	5.7%
$1,500-$2,000	2.4%
Over $2,000	1.8%

Support from savings:	
None	81.5%
$1-$499	10.7%
$500-$999	3.3%
$1,000-$1,499	1.8%
$1,500-$2,000	1.0%
Over $2,000	1.6%

Federal Guaranteed Student Loan:	
Heard of program	48.5%
Applied for aid	22.5%
Qualified for aid	19.0%

Support from federal Guaranteed Student Loan:	
None	79.2%
$1-$499	1.8%
$500-$999	2.3%
$1,000-$1,499	3.3%
$1,500-$2,000	4.2%
Over $2,000	9.2%

Support from college loan:	
None	96.5%
$1-$499	0.8%
$500-$999	0.7%
$1,000-$1,499	0.5%
$1,500-$2,000	0.6%
Over $2,000	0.9%

Support from National Direct Student Loan:	
None	93.8%
$1-$499	1.4%
$500-$999	1.7%
$1,000-$1,499	1.4%
$1,500-$2,000	0.7%
Over $2,000	1.0%

Support from other loan:	
None	95.9%
$1-$499	0.8%
$500-$999	0.8%
$1,000-$1,499	0.7%
$1,500-$2,000	0.7%
Over $2,000	1.2%

Support from Social Security benefits:	
None	96.8%
$1-$499	1.3%
$500-$999	0.7%
$1,000-$1,499	0.5%
$1,500-$2,000	0.3%
Over $2,000	0.4%

Other sources of support:	
None	97.0%
$1-$499	1.1%
$500-$999	0.4%
$1,000-$1,499	0.3%
$1,500-$2,000	0.2%
Over $2,000	1.0%

Attitudes

	All institutions			2-year colleges		4-year colleges				Universities		Predominantly black colleges	
	Men	Women	Total	Public	Private	Public	Pvt., non-sectarian	Protestant	Catholic	Public	Private	Public	Private
Political views:													
Far left	2.1%	1.5%	1.8%	1.9%	2.9%	2.0%	2.0%	1.5%	1.3%	1.3%	1.5%	5.3%	4.2%
Liberal	18.5%	19.4%	18.9%	16.7%	18.4%	18.6%	24.6%	18.3%	18.6%	19.8%	25.3%	22.8%	32.3%
Middle of the road	55.9%	63.7%	59.8%	64.9%	58.9%	60.2%	53.0%	53.9%	60.8%	57.5%	48.8%	50.5%	45.9%
Conservative	22.0%	14.9%	18.4%	15.6%	18.1%	18.1%	19.3%	25.2%	18.2%	20.6%	23.2%	18.6%	15.6%
Far right	1.5%	0.6%	1.0%	0.9%	1.7%	1.1%	1.1%	1.1%	1.1%	0.9%	1.1%	2.7%	2.0%
Agree strongly or somewhat that:													
Government isn't protecting consumer	64.4%	73.1%	68.8%	70.7%	70.9%	70.5%	69.7%	66.8%	68.4%	64.6%	62.4%	77.4%	80.5%
Government isn't controlling pollution	74.9%	82.2%	78.6%	78.6%	77.0%	79.2%	81.2%	78.8%	80.5%	76.6%	79.7%	79.1%	82.1%
Government should discourage the use of energy	74.5%	80.8%	77.6%	76.5%	77.1%	78.5%	79.8%	77.2%	78.8%	77.6%	79.2%	75.8%	76.9%
Military spending should be increased	47.9%	29.9%	38.8%	40.7%	44.4%	40.1%	31.7%	37.5%	30.3%	39.0%	31.5%	41.3%	31.1%
Criminals have too many rights	74.3%	65.5%	69.8%	71.1%	66.4%	69.3%	67.3%	69.9%	69.1%	70.5%	67.7%	56.9%	53.6%
Inflation is the country's biggest domestic problem	75.9%	81.9%	78.9%	82.3%	80.4%	80.5%	74.4%	75.9%	77.4%	75.5%	69.8%	83.6%	82.4%
The death penalty should be abolished	23.1%	33.5%	28.4%	26.6%	30.3%	29.0%	30.8%	29.7%	35.8%	27.1%	31.1%	45.5%	48.2%
Government should provide a national health-care plan	54.4%	60.5%	57.5%	61.3%	59.5%	59.9%	57.3%	51.0%	57.4%	50.7%	50.4%	75.0%	74.7%
Abortion should be legalized	53.7%	55.9%	54.8%	53.3%	54.4%	54.8%	62.7%	47.0%	34.8%	59.1%	58.2%	61.4%	62.7%
Grading in high school is too easy	55.1%	54.0%	54.5%	52.8%	43.5%	53.2%	57.3%	57.7%	55.2%	58.4%	60.5%	38.1%	45.2%
Women's activities should be confined to the home	33.6%	17.6%	25.5%	27.7%	30.9%	25.2%	22.1%	27.6%	22.4%	23.0%	19.7%	32.1%	27.4%
Couples should live together before marriage	48.3%	37.5%	42.8%	47.3%	43.3%	40.8%	47.9%	28.4%	32.1%	40.4%	42.2%	48.8%	44.1%
Large families should be discouraged	42.4%	32.3%	37.3%	37.8%	35.4%	35.9%	39.0%	37.8%	25.6%	39.6%	36.7%	30.9%	28.4%
Divorce laws should be liberalized	46.8%	42.5%	44.6%	48.9%	48.2%	44.8%	44.3%	32.7%	32.7%	42.2%	39.4%	57.9%	57.2%
It is all right for people who like each other to have sex	64.0%	32.8%	48.2%	52.3%	45.2%	47.1%	51.5%	33.2%	33.6%	46.1%	47.1%	54.5%	48.0%
Women should have job equality	88.2%	96.6%	92.5%	91.6%	88.7%	92.7%	94.1%	92.0%	94.1%	93.2%	94.9%	91.8%	92.6%
The rich should pay a larger share of taxes	72.4%	71.7%	72.1%	75.0%	69.5%	75.2%	68.4%	70.5%	70.7%	68.4%	61.7%	78.6%	78.2%
Marijuana should be legalized	32.5%	26.4%	29.4%	32.2%	30.1%	27.7%	32.8%	19.3%	22.5%	28.6%	29.1%	34.9%	31.6%
Busing to achieve racial balance is all right	43.8%	49.8%	46.8%	50.3%	55.3%	48.2%	47.5%	44.4%	43.1%	38.8%	41.6%	70.2%	71.7%
Homosexual relations should be prohibited	57.0%	37.6%	47.2%	51.3%	56.2%	47.6%	39.0%	53.7%	41.1%	43.1%	32.9%	52.8%	47.1%
College has the right to regulate off-campus behavior	15.9%	13.2%	14.5%	15.0%	20.5%	15.2%	13.3%	18.6%	12.8%	11.5%	12.5%	27.8%	25.5%
Students should help evaluate faculty members	69.9%	70.0%	70.0%	68.4%	65.4%	69.6%	71.7%	69.6%	70.1%	72.9%	73.5%	63.8%	65.6%
College grades should be abolished	17.1%	12.4%	14.7%	15.7%	20.4%	14.5%	14.2%	13.2%	13.2%	13.4%	12.6%	22.1%	17.6%
Student publications should be regulated	39.3%	41.9%	40.6%	43.9%	48.9%	41.8%	35.4%	47.4%	39.7%	34.5%	29.5%	54.4%	52.6%
Objectives considered essential or very important:													
Achieving in a performing art	10.6%	12.8%	11.7%	8.6%	13.5%	13.3%	15.6%	14.1%	11.5%	12.3%	15.1%	17.7%	16.0%
Becoming an authority in his or her field	75.1%	71.9%	73.5%	70.3%	72.4%	75.5%	75.0%	71.4%	71.8%	76.6%	77.1%	79.8%	83.8%
Obtaining recognition from colleagues	57.1%	53.6%	55.3%	51.1%	54.6%	57.7%	58.7%	50.7%	53.6%	59.6%	60.5%	62.9%	68.6%
Influencing the political structure	18.1%	11.7%	14.8%	11.5%	14.9%	15.6%	18.1%	15.8%	16.0%	16.7%	21.4%	23.8%	31.1%
Influencing social values	28.6%	33.6%	31.1%	27.4%	34.0%	32.8%	33.6%	36.8%	35.1%	31.5%	34.4%	42.5%	48.1%
Raising a family	66.2%	67.9%	67.1%	65.4%	65.2%	67.1%	66.3%	70.5%	72.3%	68.6%	69.1%	56.0%	60.2%
Having administrative responsibility	41.9%	39.1%	40.5%	39.6%	40.9%	42.7%	38.1%	36.2%	39.7%	42.1%	39.7%	49.5%	48.4%
Being very well-off financially	73.1%	64.9%	68.9%	70.8%	66.6%	69.8%	66.5%	58.0%	61.9%	70.7%	66.9%	82.9%	81.3%
Helping others who are in difficulty	53.5%	69.4%	61.6%	57.3%	61.9%	64.4%	63.3%	68.6%	67.9%	61.4%	65.5%	71.7%	74.9%
Making a contribution to scientific theory	18.1%	10.4%	14.2%	12.6%	12.2%	13.9%	15.5%	12.1%	11.8%	16.9%	20.1%	17.3%	24.2%
Writing original works	11.1%	12.1%	11.6%	9.0%	11.9%	11.8%	16.0%	12.7%	12.0%	12.7%	16.6%	13.7%	17.2%
Creating artistic works	10.9%	13.9%	12.4%	10.8%	18.8%	12.0%	17.3%	12.1%	12.6%	12.6%	12.5%	15.7%	14.3%
Being successful in his or her own business	54.7%	44.8%	49.7%	49.1%	56.7%	48.9%	50.9%	46.9%	46.4%	50.7%	49.7%	66.2%	66.0%
Helping clean up environment	25.3%	20.5%	22.9%	22.1%	24.4%	23.5%	25.4%	22.5%	21.1%	22.7%	22.0%	32.7%	31.9%
Developing a philosophy of life	46.0%	47.5%	46.7%	40.1%	46.3%	47.9%	52.7%	52.1%	52.1%	50.1%	58.5%	58.5%	64.3%
Participating in community action	21.2%	24.4%	22.8%	18.2%	25.3%	25.0%	25.7%	26.3%	26.0%	24.5%	27.3%	37.2%	43.1%
Promoting racial understanding	28.7%	32.5%	30.7%	24.3%	32.3%	34.9%	38.1%	35.4%	33.6%	30.0%	39.7%	64.1%	72.1%
Keeping up with political affairs	43.4%	33.1%	38.2%	29.5%	31.6%	39.5%	46.3%	40.5%	43.2%	45.0%	56.8%	43.1%	55.6%

SOURCE: "THE AMERICAN FRESHMAN: NATIONAL NORMS FOR FALL, 1982," BY ALEXANDER W. ASTIN, PUBLISHED BY AMERICAN COUNCIL ON EDUCATION AND UNIVERSITY OF CALIFORNIA AT LOS ANGELES

CHRONICLE SURVEY

Men's and Women's 1982-83 Salaries Compared

	Public institutions				Private institutions				All institutions			
	Average (a)	Increase (b)	High (c)	Low (d)	Average (a)	Increase (b)	High (c)	Low (d)	Average (a)	Increase (b)	High (c)	Low (d)
Ph.D.-granting universities												
Men	$29,602	7.2%	$35,836	$23,368	$35,506	9.5%	$44,497	$26,514	$31,668	8.0%	$38,867	$24,469
Women	24,333	7.0%	30,327	18,340	24,013	10.7%	28,877	19,148	24,221	8.3%	29,819	18,623
Women's amount as percentage of men's	82%	97%	85%	78%	68%	113%	65%	72%	76%	104%	77%	76%
Comprehensive institutions (e)												
Men	$26,045	7.8%	$31,504	$20,585	$23,630	8.8%	$28,325	$18,934	$25,678	8.0%	$31,021	$20,334
Women	23,679	8.2%	28,226	19,131	20,447	9.2%	23,539	17,355	23,188	8.4%	27,514	18,861
Women's amount as percentage of men's	91%	105%	90%	93%	87%	105%	83%	92%	90%	105%	89%	93%
Institutions granting bachelor's degree only												
Men	—	—	—	—	$22,710	8.3%	$28,266	$17,154	$22,710	8.3%	$28,266	$17,154
Woman	—	—	—	—	18,747	9.3%	22,121	15,373	18,747	9.3%	22,121	15,373
Women's amount as percentage of men's	—	—	—	—	83%	113%	78%	90%	83%	113%	78%	90%
2-year colleges												
Men	$24,609	5.9%	$29,542	$19,676	—	—	—	—	$24,609	5.9%	$29,542	$19,676
Women	23,234	6.3%	27,584	18,883	—	—	—	—	23,234	6.3%	27,584	18,883
Women's amount as percentage of men's	94%	107%	93%	96%	—	—	—	—	94%	107%	93%	96%
All institutions												
Men	$26,751	7.1%	$32,302	$21,200	$29,074	9.0%	$36,117	$22,031	$27,357	7.6%	$33,298	$21,417
Women	23,756	7.3%	28,703	18,809	21,630	10.0%	25,668	17,593	23,201	8.0%	27,911	18,492
Women's amount as percentage of men's	89%	103%	89%	89%	74%	111%	71%	80%	85%	106%	64%	86%

Comparisons by Discipline

Arts	Women	Men
Average salary (a)	$22,657	$24,456
Increase (b)	7.6%	7.4%
High (c)	$29,167	$30,075
Low (d)	16,147	18,837
Salary ratio (e)	93%	100%

Business		
Average salary (a)	$22,083	$29,040
Increase (b)	7.4%	6.7%
High (c)	$26,155	$34,930
Low (d)	18,012	23,149
Salary ratio (e)	76%	100%

Engineering	Women	Men
Average salary (a)	—	$30,313
Increase (b)	—	8.5%
High (c)	—	$35,775
Low (d)	—	$24,851
Salary ratio (e)	—	100%

Humanities (f)		
Average salary (a)	$22,184	$25,494
Increase (b)	7.9%	6.7%
High (c)	$28,583	$31,256
Low (d)	15,785	19,733
Salary ratio (e)	87%	100%

Physical education	Women	Men
Average salary (a)	$22,903	$25,768
Increase (b)	7.6%	6.1%
High (c)	$27,580	$30,978
Low (d)	18,225	20,558
Salary ratio (e)	89%	100%

Science		
Average salary (a)	$22,601	$27,850
Increase (b)	8.7%	6.9%
High (c)	$28,104	$32,982
Low (d)	17,099	22,718
Salary ratio (e)	81%	100%

Social science	Women	Men
Average salary (a)	$25,177	$26,896
Increase (b)	7.0%	9.6%
High (c)	$31,250	$33,250
Low (d)	19,104	20,542
Salary ratio (e)	94%	100%

Vocational (g)		
Average salary (a)	$21,667	$24,310
Increase (b)	6.0%	6.0%
High (c)	$26,849	$29,032
Low (d)	16,486	19,589
Salary ratio (e)	89%	100%

(a) Salary averages are for base salary only. They do not include fringe benefits, other earnings, or the value of contributed services. Salary figures for faculty members employed on other than nine-month contracts are adjusted to a nine-month basis.
(b) Increase of average salary for 1982-83 over average for 1981-82, and the women's rate of increase as a percentage of the men's rate.
(c) About one-fifth reported salaries higher than the "high" salary (mean salary plus one mean deviation).
(d) About one-fifth reported salaries lower than the "low" salary (mean salary minus one mean deviation).
(e) Institutions with more than 1,500 students, a liberal-arts program, and at least one professional program.
(f) Includes language, literature, and communications.
(g) Includes home economics, health, and nursing.
— Insufficient data.

Note: Survey data are based on responses of 4,235 faculty members who offered courses from the fall of 1980 through the fall of 1982. To include faculty members newly hired, the sample was drawn from faculty lists that were revised in September, 1982.
Data are weighted to represent faculty members at colleges and universities of all types except law and medical schools, proprietary institutions, private two-year colleges, and colleges with fewer than 500 students.
Technical inquiries about the survey design and sampling techniques should be addressed to John Minter Associates, P.O. Box 107, Boulder, Colo. 80306.

SOURCE: SURVEY FOR THE CHRONICLE BY JOHN MINTER ASSOCIATES

Planning Academic Meetings

Continued from Page 23

sociate professor of history at Miami University in Ohio.

Last fall, he says, he lined up 12 speakers and sent out announcements for a proposed symposium on Lyndon B. Johnson, only to discover that no foundation was willing to back such a program outside Texas. (Although papers submitted for the conference were published, the conference itself had to be canceled.)

▶ **Choose topics that work.** "You've got to have lots of enthusiasm for the topic; otherwise the work is drudgery," says Mr. Mulvaney. Some groups ask members to suggest future topics on meeting registration forms. Others keep in touch with developments in their fields by including the editors of scholarly journals on their planning committees.

▶ **Use large planning committees to distribute the necessary workload.** Some meeting specialists also recommend enlisting students in the process, but Texas's Mr. Hackett says it's essential that students be given important work to do, not just clerical chores.

▶ **Arrange for adequate telephone backup and local publicity.** Professors are often hard to reach by telephone, says Mr. Snow of Potsdam, so they may not be able to handle inquiries from prospective conferees. Department secretaries thus should be prepared to answer key questions, he advises, or else people may lose interest in your program before they speak to you.

And don't overlook your own campus in seeking registrants, Mr. Snow says. Meeting organizers often devote too little time to publicizing the event locally. Other registrants can be attracted by adding scholars in related fields to your mailing list. Political scientists, for example, may well be interested in programs run by a philosophy department.

▶ **Select speakers carefully.** Getting the right mix of speakers depends on "hard work and serendipity," Mr. Snow says. But much of the guesswork can be eliminated if organizers consult with colleagues who have heard a speaker at other conferences. Choosing someone merely on the basis of his paper can backfire, Mr. Snow adds, because good writers are not necessarily good speakers.

Even established members of a discipline may not always make strong presentations. Often the best speakers are "young, energetic, hungry scholars" who are eager to have their research disseminated, says Mr. Jackson.

To avoid overlapping presentations and add coherence to the conference program, organizers should encourage speakers to get in touch with each other well ahead of time, Mr. Mulvaney suggests.

Donnie D. Bellamy, a history professor at Fort Valley State College, says he holds training sessions for speakers several weeks before a conference. At those sessions, the speakers share their outlines with one another and discuss how they will approach the topic.

▶ **Schedule time for informal contacts.** Besides listening to speakers, most participants in scholarly meetings expect to meet new people. Starting the conference with a social event, such as a cocktail hour or film festival in the early evening, is strongly endorsed by meeting planners.

Arranging catered lunches and dinners near the conference site can also promote informal meetings. (By keeping all the participants together, you'll also be better able to get participants back to post-meal meetings on time, planners say.)

▶ **Let the experts handle budgeting and administrative details.** "It's much better if you can have the money handled through another university office accustomed to finances," Mr. Snow advises. Find out ahead of time how your institution handles speakers' fees, registration payments, receipts, and other financial matters.

Developing a budget is probably the most difficult task that academic conference planners face. Ms. Dacus of the University of Minnesota says people are often unrealistic about program costs and fail to budget enough money for extra expenses, such as medical bills for conference participants who get sick and delivery charges for conference materials.

▶ **Anticipate last-minute complications.** Even a well-planned conference can be ruined by last-minute cancellations by speakers, bad weather, equipment breakdowns, and other unforeseeable events. Conference coordinators may therefore wish to leave themselves free of specific responsibilities during the meeting so they can act as "troubleshooters."

Finding suitable substitute speakers, for example, is relatively easy on a university campus, says Mr. Snow. When a scheduled speaker had to drop out of his symposium at Potsdam, Mr. Snow managed to get a professor from his own campus to stand in—and ended up saving on travel and hotel expenses.

"If you've done your planning, don't get frazzled," says Ms. Dacus. "People are receptive and understanding. They realize some things are beyond your control."

▶ **Ask participants to evaluate the program.** Many organizers who have not done so say they wish they had. Written evaluations can then be passed along to next year's conference chairman.

▶ **Get outside help.** Most universities have professional meeting planners on their staffs, frequently in alumni offices and continuing-education divisions. Many charge a fee to plan entire meetings, but sometimes their staff members will provide free advice. Local chambers of commerce and tourist bureaus also will advise academics and can provide maps, hotel and restaurant guides, and transportation tips.

In addition, campus news services are often able to help with publicity and advertising for campus events.

Solution to Last Week's Chronicle Acrostic

"Faculty members often distrust those whose interests cross territorial lines, arguing that interdisciplinary concerns detract from the work they deem the most important: the knowledge and methodology of their own disciplines."—S(usan) Parr, The Moral of the Story.

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THE CHRONICLE
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News Summary

Articles on inside pages

The revised code of canon law signed by Pope John Paul II may give Catholic bishops greater control over the teaching of theology at some colleges. Story on Page 9.

Financial chaos has been predicted at Michigan's public colleges if budget cuts proposed by Gov. James J. Blanchard go into effect. Story on Page 12.

The Justice Department has urged the Supreme Court not to review an appeals-court ruling requiring Grove City College to certify that it will comply with federal anti-sex-bias law. Story on Page 13.

The nursing shortage of the 1960's and 1970's has been virtually eliminated, a committee of the Institute of Medicine reports. Story on Page 15.

Students have control over athletic-department budgets at 12 campuses of the University of Wisconsin and 17 campuses of the State University of New York. Story on Page 17.

The search for a new president has become a more open and complex process at many colleges in recent years. Story on Page 21.

Few colleges have decided to pull out of the Social Security system, despite worries over its future. Story on Page 21.

Woman scientists have been brought "out of the footnotes and into the text" in a new study published by the Johns Hopkins University Press. Story on Page 25.

A Jewish mathematician who documented cases of anti-Semitism at Moscow State University has been sentenced to five years' internal exile. Story on Page 19.

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Testing-Service Head Hits NCAA's Academic Rules

CHRONICLE PHOTOGRAPH BY JOHN C. PHILLIPS
Educational Testing Service's Gregory R. Anrig

By N. SCOTT VANCE

The president of the Educational Testing Service has joined civil-rights leaders and presidents of black colleges in criticizing new academic requirements for athletes that they say will discriminate against members of minority groups.

The E.T.S. develops and administers the country's most widely used admissions examination, the Scholastic Aptitude Test.

Gregory R. Anrig, president of E.T.S., said he opposed the rule adopted by the National Collegiate Athletic Association at its annual convention last month because it will require students to have earned a minimum standardized-test score to take part in intercollegiate sports in the freshman year. The proposal, which is scheduled to take effect in 1986 and applies to the 277 colleges in the N.C.A.A.'s Division I, will also require students to have a minimum grade-point average in a specified high-school curriculum.

Mr. Anrig offered the N.C.A.A. and the American Council on Education, which was instrumental in drafting the new rule, the assistance of E.T.S. and the College Board in considering alternatives that would not discriminate against blacks.

Unanticipated Effects

While he praised the N.C.A.A.'s effort "to address this issue of standards for athletes," he said the "use of a fixed cutoff score on national standardized admissions tests will have effects that may not have been fully realized before this decision was reached."

If the new requirements had been in effect in 1981, he said, 51 per cent of all black male freshmen would not have qualified for athletic competition at N.C.A.A. Division I institutions because

Continued on Page 18, Column 2

Reagan Eyes Student-Aid Changes, Modest Cuts in Guaranteed Loans

Work-study funds would be increased by 60 pct.

By JANET HOOK

WASHINGTON

The Reagan Administration was putting the finishing touches last week on student-aid proposals that would:

▶ Make only modest changes in the Guaranteed Student Loan program, compared with the substantial reductions sought a year ago.

▶ Freeze total federal spending on programs other than Guaranteed Student Loans.

▶ Allow needy students to get bigger Pell Grants but require them to put up some of their own money to pay for college.

▶ Increase funds for College Work-Study by almost 60 per cent.

▶ Provide no money for three other student-aid programs.

▶ Give tax breaks to parents who put money into special savings accounts for college expenses.

Most of those proposals are expected to be outlined in the budget that President Reagan is sending to Congress this week.

Announcing the outlines of the savings proposal in his State of the Union address, President Reagan said the plan would "give middle- and lower-income families an incentive to save for their children's college education and, at the same time, encourage a real increase in savings for economic growth."

White House documents now indicate that the savings-account plan will not be modeled on Individual Retirement Accounts, as was proposed earlier. Parents would pay income taxes on the money they deposit in the accounts, but the interest income would be tax-exempt.

Administration sources said the tax-incentive plan and the Education Department's student-aid proposals were intended to promote the Administration's view that students and their families should bear the primary responsibility for financing college education.

Hope for More Support

When that policy was advocated by the Administration last year, critics contended it was simply an excuse for cutting the federal budget—and the President's proposals were virtually ignored on Capitol Hill. But this year, since the White House is not proposing an overall reduction in federal spending, officials say they hope the plans to revamp student-aid policy will win greater support in Congress.

If Congress does approve the Adminis-

Continued on Page 14, Column 1

Universities Trim Research Programs in Agriculture

By KIM McDONALD

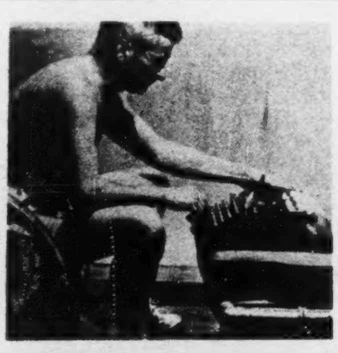
When the University of Florida's Institute of Food and Agricultural Sciences received an extra $10-million from the state in the three years from fiscal 1979 through 1981, scientists there expanded research programs, purchased new equipment, and hired more laboratory technicians.

This year, under the state's hold-the-line budget, the situation is markedly different. The institute has trimmed operating expenses, reduced the number of temporary employees, limited travel for scientists, and eliminated about $2-million worth of research programs.

Similar changes are taking place across the country as the continuing economic recession diminishes state revenues and forces reductions in agricultural research and education programs at state land-grant institutions. For example:

▶ At Oregon State University, a drop of nearly $4.5-million in state support for its

Continued on Page 10, Column 1



Scholars Are Assessing Writers in Hollywood

Writing movie scripts for Hollywood proved to be a difficult task for many authors, including William Faulkner, left. Yet some of the greatest American writers of this century did such work. Many literary scholars are interested in that phenomenon and are giving it serious study.

Article begins on Page 7.

Agriculture

Continued from Page 1

agricultural-experiment station over the past three years forced administrators there to reduce the number of faculty members by 15 per cent and cut back research on nursery crops, the fourth largest agricultural enterprise in the state.

▶ At Ohio State University, state budget reductions begun two years ago have cut out more than a quarter of the 46 faculty positions in the department of agricultural economics and rural sociology. In that same period, a $250,000 cut in the budget of Ohio State's poultry-science department forced administrators to eliminate some research projects, which scientists there warn could eventually result in higher chicken and turkey prices for consumers.

▶ Dwindling state revenues and a 17.6-per-cent unemployment rate in Michigan have led to a 21-per-cent cut in state funds for agricultural research at Michigan State University for fiscal 1983. Researchers may face an additional cut of from 3 to 5 per cent this month.

Not all of the agricultural-experiment stations operated by the land-grant institutions have had their state funds reduced, and, at some, cuts have been offset by a slight increase in federal support.

But the states generally provide the lion's share of funds for the stations—typically about four times the amount received from the federal government—and at many stations, directors say, state support is steadily shrinking.

The most recent statistics compiled by the U.S. Department of Agriculture show that 12 states—mostly in the North and Midwest—provided less money for agricultural-experiment stations in fiscal 1981 than they did in fiscal 1980.

A recent report by the National Governor's Association and the National Association of State Budget Officers found that all but 7 of the 41 states they surveyed had reduced overall spending in fiscal 1982 or fiscal 1983. In addition, according to the report, revenues in the current year fell nearly $8-billion short of the amount state budget officials had estimated last spring.

In Georgia, for example, a shortfall in state revenues of nearly 3 per cent last year prompted a $572,000 cut at the University of Georgia's agricultural-experiment station, which had received generous appropriations in the past.

"This is the first time in my 10 to 12 years here that we had a cut from the state," said E. Broadus Browne, director of the station and associate dean of Georgia's college of agriculture.

'Less Worse'

Agriculture is by no means the hardest-hit state-supported enterprise. Because governors and legislators in many states have recognized the importance of agricultural research to state economies, university officials say, money for state agricultural-experiment stations has often been cut less than in other areas. With added support from the federal government, private industry, and foundations, they add, the financing of agricultural-research programs has sometimes fared "a shade better" than that for other research and education activities at land-grant institutions.

"More accurately, it's 'less worse,' " said Mark T. Buchanan, director at large of the Western Association of Agricultural Experiment Station Directors.

Funds for Agricultural-Experiment Stations

State	Experiment station	Hatch Act funds (add 000)	State appropriations (add 000)	All funds (add 000)
Alabama	Auburn	$2,303	$ 7,320	$17,014
Alaska	Fairbanks	631	1,895	3,022
Arizona	Tucson	854	9,715	16,705
Arkansas	Fayetteville	1,957	10,397	16,713
California	Berkeley	2,478	61,495	87,652
Colorado	Fort Collins	1,134	6,470	27,125
Connecticut	New Haven	487	1,640	2,319
	Storrs	487	1,409	2,240
Delaware	Newark	676	1,720	3,527
D.C.	Washington	67	0	113
Florida	Gainesville	1,566	34,570	45,282
Georgia	Athens	2,520	21,378	27,841
Hawaii	Honolulu	674	6,312	9,230
Idaho	Moscow	1,053	4,813	10,194
Illinois	Urbana	3,095	8,013	17,830
Indiana	Lafayette	2,831	11,364	27,003
Iowa	Ames	2,920	8,432	21,229
Kansas	Manhattan	1,826	10,851	24,179
Kentucky	Lexington	2,890	8,382	12,429
Louisiana	Baton Rouge	1,817	17,393	25,103
Maine	Orono	946	1,663	5,723
Maryland	College Park	1,307	4,469	6,958
Massachusetts	Amherst	1,143	2,027	4,821
Michigan	Lansing	2,860	8,982	18,684
Minnesota	St. Paul	2,768	18,386	27,594
Mississippi	State College	2,416	12,285	23,237
Missouri	Columbia	2,685	8,001	17,498
Montana	Bozeman	1,005	3,610	9,472
Nebraska	Lincoln	$1,702	$ 9,712	$25,971
Nevada	Reno	620	2,381	4,648
New Hampshire	Durham	761	1,114	2,514
New Jersey	New Brunswick	1,124	8,263	13,606
New Mexico	University Park	885	1,995	3,606
New York	Ithaca	2,551	12,936	35,140
	Geneva	279	4,148	6,015
North Carolina	Raleigh	3,832	22,149	35,039
North Dakota	Fargo	1,268	10,499	15,189
Ohio	Wooster	3,381	13,757	19,458
Oklahoma	Stillwater	1,755	6,030	11,788
Oregon	Corvallis	1,311	8,884	19,629
Pennsylvania	University Park	3,406	6,756	14,688
Rhode Island	Kingston	629	950	2,817
South Carolina	Clemson	1,987	9,159	11,715
South Dakota	Brookings	1,295	3,480	7,029
Tennessee	Knoxville	2,831	5,982	16,378
Texas	College Station	3,588	20,666	36,589
Utah	Logan	781	4,225	8,196
Vermont	Burlington	811	1,036	2,509
Virginia	Blacksburg	2,429	12,106	22,343
Washington	Pullman	1,497	8,559	20,072
West Virginia	Morgantown	1,556	1,597	4,497
Wisconsin	Madison	2,777	13,662	28,222
Wyoming	Laramie	747	2,191	3,837
Guam	Agana	422	364	877
Puerto Rico	Rio Piedras	2,658	5,231	9,850
Virgin Islands	St. Thomas	294	160	500

All figures are for fiscal 1981

SOURCE: U.S. DEPARTMENT OF AGRICULTURE

But in some cases, it's much worse.

Raymond J. Miller, dean of the college of agriculture and director of the state agricultural-experiment station at the University of Idaho, said that since fiscal 1980 the state had cut $2.3-million from his budget for research and extension-service programs. Partly because the experiment station does not benefit from the fee increases that have been imposed on students at the university, he said, he has lost 82 positions in research and extension programs. Eleven tenured faculty members were let go.

Many other experiment stations and colleges of agriculture have not been able to fill the positions of faculty members who quit or retired.

At both the college of agricultural science and the experiment station at Clemson University, for example, 14 faculty positions and 38 support-staff positions are unfilled.

Washington State University and the University of Wisconsin at Madison each have 30 teaching and research positions vacant in their agricultural programs. Michigan State has left vacant 16 research and teaching positions and 35 extension-service positions.

Although many institutions have been able to avoid laying off faculty members by leaving positions unfilled when faculty members leave or retire, that has sometimes resulted in vacancies' being concentrated in specific programs and departments, which then must reduce the number of their graduate students accordingly.

"If I could give advice to anyone, I would say don't be so unlucky as to have a lot of faculty members who are nearing retirement age," said David H. Boyne, chairman of Ohio State's department of agricultural economics and rural sociology, which lost 12 faculty positions during the past two years.

Mr. Boyne said that because of losing those faculty members he had been forced to reduce the number of graduate students in his department by 17 per cent.

Sylvan H. Wittwer, director of the agricultural-experiment station at Michigan State, said cuts in the number of faculty members there also had required a 20-per-cent reduction in the number of graduate students.

If budget cutbacks continue this year, Mr. Wittwer added, Michigan State's college of agriculture may have to reduce its graduate enrollment—normally 600 students—by 50 per cent.

Extension Services Hurt

Not only have state cuts limited research and education activities; they also have affected the amount of information and expert help the state experiment stations can provide to farmers through their cooperative extension service.

Because of forced economies in Idaho, Mr. Miller said, programs to help farmers grow better potatoes and improve their animals' health have been eliminated, as has research needed on seed physiology and soil.

The cuts in state budgets have also disrupted the continuity of many long-term research projects that agricultural scientists engage in.

"You have to wait nine months to complete research on cow reproduction," said Edwin Kersting, dean of the University of Connecticut's college of agriculture and director of its experiment station at Storrs, where research was disrupted by a 5-per-cent reduction in state revenues this year. "And there's only one growing season in Connecticut," he said.

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At Michigan State, Mr. Wittwer noted, delays or termination of plans to upgrade his station's research equipment and facilities, in addition to the loss of graduate students and technicians, are "having a major impact on our ability to recruit top scientists."

Michigan State is now constructing a plant-science and horticulture building that James H. Anderson, dean of the college of agriculture and natural resources there, hopes will increase the institution's involvement in such areas as the use of genetic-engineering techniques to produce new kinds of crops.

As part of that plan, Mr. Anderson said, his institution hopes to offset reduced state support with increased competitive-grant support from federal agencies such as the National Science Foundation and the National Institutes of Health. When additional support is available, he added, he plans to fill positions so that researchers can work on gene splicing and study economically important crops.

"We're trying to build programs at the same time that we're retrenching," Mr. Wittwer said.

At Oregon State, John R. Davis, director of its experiment station and associate dean of the school of agriculture, plans to take similar actions.

Reducing the number of agriculture-faculty members means fewer researchers available to write grant proposals to obtain more revenue, Mr. Davis said, but "our faculty members are becoming more aggressive" at seeking outside sources of funds. He said that while the experiment station had dropped many research projects in production, such as viticulture and grass seeding, it was trying to maintain its basic research activities and hoped to expand in such areas as genetic engineering, pest management, and the development of new crops.

Relying More on Grants

Despite recent criticism from the White House and Congress that the agricultural-research system fosters "inadequacies in the quantity and quality of basic research," many experiment-station directors faced with limited or decreasing budgets say they are seeking more support for basic research.

"The trend in the last several years is to rely more and more on grant funds," said Bill R. Baumgardt of the agricultural-experiment station he directs at Purdue University. The station increased its total revenues by 5 per cent this year over fiscal 1982, partly with money from grants.

Mr. Baumgardt, also associate dean of the school of agriculture, said grants from federal agencies, the state, and industry account for about 36 per cent of the budget at Purdue's agricultural-experiment station.

Among the institutions that have been most successful in expanding research programs despite diminishing state funds or, at best, meager increases are Cornell University's experiment stations at Ithaca and Geneva, N.Y.

Although support from New York State has not kept up with inflation for the past 5 years, said Alexander C. Davis, acting director of the Geneva station, "our budgets have been increasing. We're eating up inflation by going outside" to obtain grants from federal agencies, chemical companies, and even foreign countries, such as Israel. Such actions, he said, have increased the station's total budget from $6-million a few years ago to $9-million last year.

Mr. Davis said Cornell had made an effort to expand its outside support because New York had experienced fiscal problems long before many other states, and because Cornell gets relatively few federal funds because of the Hatch Act's formula for computing such support, which is based on rural population and the number of farms. New York has a relatively small rural population, so the Geneva station gets only 10 per cent of its revenue from the federal program.

However, Mr. Davis said, outside support should not be allowed to distort the primary mission of the experiment station, which is to improve the state's agricultural enterprise.

"Our people design projects to satisfy the granting agency, and sometimes it's difficult to justify why we're in that area," he said.

For example, researchers at Geneva conduct studies on insects "that have no relationship to the state," he said, and have done a substantial amount of research on soybeans, which is a minor crop in New York.

But Lamb Hood, associate director of Cornell's Ithaca station, disagrees, saying that such research can eventually be applied to New York's agricultural problems.

Through research on the sticky leaves of potato plants in Peru, for example, he said, Cornell scientists developed a strain of New York potatoes able to resist the Colorado potato beetle by trapping the insect in its leaves.

Increasing competitive grants "is a two-edged sword," said Mr. Baumgardt of Purdue. "We have turned down some outside funding because we thought it was not in the public interest. But we're looking for all possible ways to interest government and industry sources."

Guggenheim Fellowships: Berkeley Gets 331 in 18 Years

Faculty members at the University of California at Berkeley have won more Guggenheim Fellowships than those at any other university, according to a report from the John Simon Guggenheim Memorial Foundation covering the years from 1964 through 1981.

Following are the top 25 universities and the number of their faculty members receiving Guggenheim Fellowships over the 18-year period:

U. of California, Berkeley	331
Harvard U.	229
Columbia U.	206
Yale U.	177
Stanford U.	150
U. of California, Los Angeles	143
Cornell U.	126
U. of Pennsylvania	126
Princeton U.	123
U. of Chicago	120
U. of Illinois	111
U. of Wisconsin, Madison	107
Massachusetts Inst. of Tech.	99
U. of Michigan	94
U. of California, San Diego	85
New York U.	83
U. of Washington	79
Indiana U.	76
Brown U.	60
U. of Minnesota	53
U. of Texas	52
U. of Toronto	49
Brandeis U.	48
U. of California, Davis	44
Northwestern U.	42

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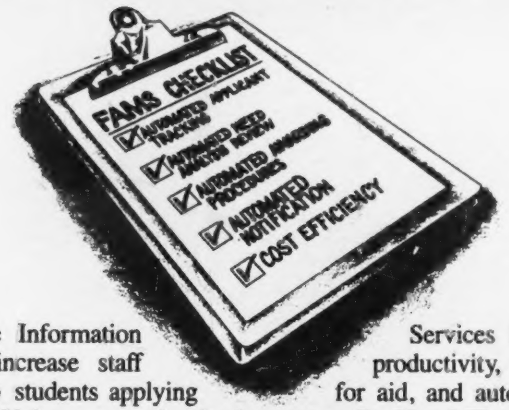
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FACT-FILE

Where the Merit Scholars Are

The top 105 campuses in first-year enrollment of national-scholarship winners in fall of 1982

	Freshmen	Rank
U. of Alabama, Tuscaloosa	12	90
Amherst C.	19	62
Arizona State U.	12	90
U. of Arkansas, Fayetteville	22	54
Auburn U.	14	83
Baylor U.	56	19
Boston U.	35	37
Bradley U.	11	95
Brigham Young U.	27	48
Brown U.	57	18
Bucknell U.	11	95
U. of California		
Berkeley	42	31
Los Angeles	18	67
California Inst. of Technology	30	41
Carleton C.	98	12
Carnegie-Mellon U.	21	58
Case Western Reserve U.	56	20
U. of Chicago	84	15
U. of Cincinnati	16	73
Clarkson C.	11	95
Clemson U.	11	95
U. of Colorado	22	54
Cornell U.	55	21
Dartmouth C.	43	30
Davidson C.	11	95
U. of Delaware	16	73
Drake U.	11	95
Duke U.	64	17
Emory U.	30	41
U. of Florida	105	11
Florida State U.	46	27
Georgetown U.	26	50
U. of Georgia	51	23
Georgia Inst. of Technology	116	14
Grinnell C.	13	86
Gustavus Adolphus C.	11	95
Harvard U.	295	1
Hendrix C.	11	95
Hope C.	14	83
U. of Illinois	51	23
Indiana U.	13	86
U. of Iowa	42	31
Iowa State U.	49	26
Johns Hopkins U.	31	40
U. of Kansas	41	34
Kansas State U.	15	79
Lawrence U.	13	86
Lehigh U.	22	54
Louisiana State U.	13	86
Macalester C.	22	54
U. of Maryland, College Park	28	46
Massachusetts Inst. of Technology	152	6
U. of Miami	12	90
Miami U. (Ohio)	19	62
U. of Michigan, Ann Arbor	45	28
Michigan State U.	98	12
Michigan Technological U.	12	90
U. of Minnesota, Minneapolis	44	29
U. of Missouri, Columbia	52	22
U. of Nebraska, Lincoln	42	31
U. of North Carolina, Chapel Hill	21	58
North Carolina State U.	15	79
U. of North Dakota	16	73
Northwestern U.	142	7
U. of Notre Dame	41	34
Oberlin C.	12	90
Ohio State U.	72	16
U. of Oregon	17	70
U. of Pennsylvania	51	23
Pennsylvania State U.	29	45
Pomona C.	18	67
Princeton U.	190	2
U. of Puget Sound	16	73
Purdue U.	33	38
Rensselaer Polytechnic Inst.	39	36
Rice U.	172	4
Rose-Hulman Inst. of Technology	25	52
Rutgers U.	15	79
Saint Olaf C.	26	50
U. of South Carolina, Columbia	11	95
U. of Southern California	19	62
Southern Methodist U.	14	83
Southwestern at Memphis	11	95
Stanford U.	107	10
Swarthmore C.	18	67
U. of Tennessee, Knoxville	19	62
U. of Texas, Austin	130	8
Texas A&M U.	190	2
Trinity U.	30	41
Tulane U.	24	53
U. of Utah	15	79
Valparaiso U.	11	95
Vanderbilt U.	20	60
U. of Virginia	32	39
Virginia Polytechnic Inst. & State U.	28	46
U. of Washington	16	73
Washington and Lee U.	19	62
Washington U. (Mo.)	111	9
West Virginia U.	27	48
Wheaton C. (Illinois)	16	73
Whitman C.	17	70
C. of William and Mary	17	70
Williams C.	30	41
U. of Wisconsin, Madison	20	60
Yale U.	171	5

SOURCE: NATIONAL MERIT SCHOLARSHIP CORPORATION

Michigan Colleges Say Budget Cuts Will Cause Financial Chaos

LANSING, MICH.

Gov. James J. Blanchard of Michigan last week proposed a 38-per-cent rise in the state income tax and called for $225-million in budget cuts, about a third of which are expected to come from public colleges and universities.

In his first State of the State Address, the new governor, a Democrat who took office January 3, said the financially ravaged state "must move away from the precipice of bankruptcy."

College officials praised the proposed tax hike as a necessary step toward financial solvency, but they warned that budget cuts of such magnitude—about 9 per cent of all state aid to colleges—would create financial chaos at the universities.

Michigan, with the country's highest unemployment rate, has a budget deficit estimated at more than $750-million.

Since taking office last month, Mr. Blanchard has deferred two months of state-aid payments to Michigan's 15 four-year colleges and 29 community colleges.

His speech focused largely on unemployment and the need for jobs. But several times he cited the state's beleaguered colleges. "Programs more important than ever to our short-term and long-term development, such as higher education, have already felt the cold steel of the knife of budget cuts," he said.

Mr. Blanchard did not specify how he planned to divide the $225-million in budget cuts, except to say he would not touch aid to the unemployed. Most political observers expect him to follow closely the advice of his "Financial Crisis Council," which recommended cuts of $60-million at four-year colleges and $15-million at community colleges.

That prospect has college officials worried. The day before Mr. Blanchard's speech, a delegation of five college presidents visited the governor to urge him not to "mortgage the future" by cutting aid to education. They delivered a letter signed by all 15 of the state's university presidents.

"We told him that such a cut would be devastating and unconscionable," said Harold Abel, president of Central Michigan University."It would give us two options—make dramatic cuts in our programs and personnel, or raise our tuition by 50 per cent, making us a private college for all practical purposes."

Richard Kennedy, vice-president for state relations at the University of Michigan, said the crisis council's plan would "simply be unmanageable for us. We've had cuts of $30-million since 1980, and that has left us grasping."

College presidents say they will lobby for the plan, which would increase the personal income tax from 4.6 to 6.35 per cent and raise approximately $800-million a year.

Mr. Blanchard said it was "stern medicine, but we have a very sick patient on our hands."

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'In' Box

Late premium payments by some colleges and universities are cutting into retirement-fund accumulations for employees who participate in the Teachers Insurance and Annuity Association and the College Retirement Equity Fund.

It's not a widespread or "serious" problem, says William T. Slater, senior vice-president at T.I.A.A. and C.R.E.F., but "there are institutions that are late"—submitting monthly premiums for faculty members and other participants past the usual 31-day grace period. The companies, in turn, do not credit the payments or start figuring earnings on them until they are received.

Beginning next month, however, individual participants will be notified directly by T.I.A.A. and C.R.E.F. when monthly premiums for the previous calendar year were due and when they were received (and thus credited to their accounts).

According to Mr. Slater, colleges have known for more than a year that such information will be provided. It will be included in the companies' latest annual *Report of Annuity Premiums and Benefits* to all owners of T.I.A.A. or C.R.E.F. annuities.

■

Two other publications of interest to T.I.A.A.-C.R.E.F. participants may be ordered from the companies:

▶ *Employee Retirement and Insurance Benefits Cost Survey—1981* ($4.50, prepaid), a 48-page booklet providing data from 686 colleges and universities with combined payrolls totaling $17.1-billion.

▶ *Allocating Premiums Between TIAA and CREF* (free), an updated pamphlet containing advice about choosing between the companies' fixed and variable annuities.

Order from T.I.A.A. / C.R.E.F., 730 Third Avenue, New York 10017.

■

Have the copying machines been turned off at New York University?

Ever since a group of publishers sued the university and several of its professors in December over alleged copyright violations, officials there have refused to comment publicly on the case. Last week, however, N.Y.U. spokesmen were denying a published report that, because of the suit, the university had banned all further classroom use of photocopied materials.

Other sources said that faculty members had received copies of a strict "interim photocopying policy" from S. Andrew Schaffer, vice-president and general counsel of the university. By one campus account, Mr. Schaffer said in a memo accompanying the guidelines that, while the university and publishers' representatives were discussing the "need" for litigation, issues raised by the suit were not easily resolved.

According to *Publishers Weekly*, another memo—its source not disclosed—said Mr. Schaffer had directed that no part of any published material was to be duplicated for distribution to students. But Mr. Schaffer said last week that he had issued "no such directive."

Personal & Professional

Finding the 'Right' College President Means Looking First at the College

By SUZANNE PERRY

Twenty-five years ago it was not uncommon for college trustees to hand-pick a president with barely a nod toward faculty members or anyone else who might have been interested in the process.

Since then, however, "affirmative action" and "shared governance" have made the task of choosing a president much more open and complex. Many searches now take the better part of a year, according to a recent study, and it's not unusual for one to attract as many as 200 applicants. In addition, presidential searches typically have come to involve many faculty members, students, and others connected with the college, as well as trustees. There is, in short, a lot of painstaking work by many people.

Relying on Consultants

With so much at stake, what is the best way to insure that the results are worthwhile? One good answer, according to a 1981 report commissioned by the Association of Governing Boards of Universities and Colleges and the Association of American Colleges, is to rely on outside consultants for advice and legwork.

"Too many trustees and faculty members have the mistaken notion that they would be surrendering their responsibility" if they retained a consultant, said the report, prepared by Richard D. Weigle, president emeritus of St. John's College in Maryland.

Whether or not a consultant is involved, those who have studied the selection process offer many recommendations for improving it. The first step, they say, is to tailor the search to the institution.

For example, John W. Nason, a consultant to the Association of Governing Boards, notes in a report that "the large state university surrounded by diverse political pressures will need to proceed more cautiously and circumspectly than a small church-related college where choice is limited to a member of the religious denomination or order."

Ronald S. Stead, executive director of the nonprofit Presidential Search Consultation Service, says that when his organization is hired to help find a college president, it begins by spending several days interviewing people on the campus and trying to get a sense of the type of person who would be right for the job at that point in the institution's history.

A college that has become self-satisfied may need a "mover and a shaker," he says, while one that has experienced a period of turmoil may need a "healer."

At Western Washington University, which named a president in December for the first time in eight years, the search committee concluded after consulting with people on the campus that it needed "a very different kind" of chief executive from the last one, says Peter J. Elich, chairman of the psychology department and vice-chairman of the committee.

The panel got the distinct message that the new president should be a "topnotch administrator" who could help the university weather tough economic times, Mr. Elich adds. Eight years ago, in contrast, faculty members and others emphasized "academic leadership" and "internal inspiration," he says.

Western Washington's new president is G. Robert Ross, formerly a senior consultant for the American Association of State Colleges and Universities and, before that, chancellor at the University of Arkansas at Little Rock. He succeeded Paul J. Olscamp, who had been a professor of philosophy and vice-chancellor for student programs at Syracuse University before he was appointed president.

'Ideal' Candidate May Not Exist

As a search committee formulates its list of desired characteristics, it should guard against looking for a nonexistent "ideal" president, the experts say.

Laurence Barrett, a former provost of Kalamazoo College, gives an example from a recent presidential search there that led to the appointment of David W. Breneman, a senior fellow at the Brookings Institution.

Based in part on suggestions offered at open meetings on the campus, Kalamazoo's search committee developed a "presidential profile"—but it was not very helpful, says Mr. Barrett, who served as a consultant. It was full of rhetoric, outlining many impressive qualities that a president should have but without ranking their im-

Continued on Page 23, Column 1

Most Colleges Sticking with Social Security

WASHINGTON

Despite widespread concern about the future of the Social Security system, there has been no rush among colleges and universities to pull out of the federal retirement plan.

A spot check by *The Chronicle* last week turned up only one institution—the University of Colorado—where officials were considering withdrawing from Social Security.

Meanwhile, hundreds of nonprofit agencies and government employers, which are not required to participate, have dropped out of the federal plan in recent years because of increased costs and heightened concern over the system's solvency.

If Colorado pulls out, it will join an estimated 10 per cent of colleges and universities that have never offered Social Security coverage to their employees or that once offered it but dropped out.

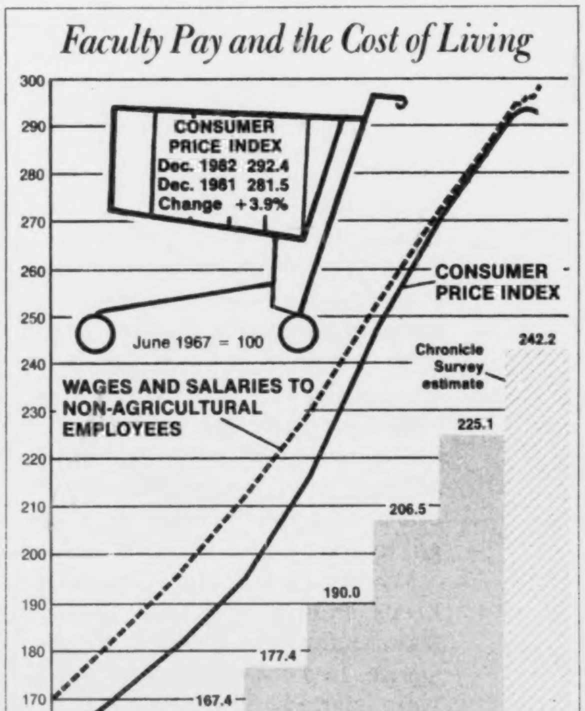
'Difficult, Costly, and Risky'

Most colleges and universities apparently agree with a report commissioned in 1979 by the University of Michigan that concluded that it would be "difficult, costly, and risky" for the university to attempt to match the benefits provided under the federal plan—benefits that employees had come to expect.

Social Security laws permit nonprofit organizations and entities of state and local governments to elect not to participate in Social Security, but that option will end if Congress adopts a package of reforms proposed by the National Commission on Social Security Reform.

Under those proposals, however, public colleges and other local-government employers that had already completed a two-year

Continued on Page 24, Column 1



Faculty Pay and the Cost of Living

SOURCES: DEPARTMENT OF LABOR, DEPARTMENT OF COMMERCE, JOHN MINTER ASSOCIATES, AND AMERICAN ASSOCIATION OF UNIVERSITY PROFESSORS

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News Summary

Articles on inside pages

The University of Texas is 100 years old this year—and proud of it. Story on Page 4.

Medical-school faculty members seem reluctant to take part in a nationwide study of medical education by the Association of American Medical Colleges. Story on Page 3.

Private colleges increased their income from tuition in 1981-82 by 14 per cent over the previous year. Story on Page 8.

The federal government has accepted a revised plan for the desegregation of Virginia's colleges and universities. Story on Page 20.

In its spare time, a computer at Cornell University has come up with an arithmetic progression of 18 prime numbers. Story on Page 27.

America's dialect humor has long been neglected by the reading public, but a new anthology of "translated" stories is intended to remedy that. Story on Page 29.

American Indians are not a "vanishing breed," according to the author of one of several new books on the subject. Story on Page 31.

Quebec is expected to adopt emergency legislation to break an illegal strike by 11,000 community-college faculty members. Story on Page 23.

The National University in El Salvador should be reopened and allowed to operate autonomously, according to a delegation of American academics that recently visited that country. Story on Page 23.

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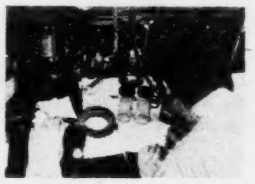
The Reagan Administration's Budget: Some Effects on Higher Education

Student Aid
Students would have to pay at least 40 per cent of education costs to qualify for a grant, but parents could save money for college without paying tax on the interest.



Research
Total funds would be up 10 per cent, with big boosts for astronomy and high-energy physics but a small increase for biomedical studies and a decrease for agriculture.

Arts and Humanities
Reductions would be less than proposed last year: 17 per cent for the National Endowment for the Humanities and 13 per cent for the National Endowment for the Arts.

Science Education
The government would spend $76-million to train more science teachers for the schools and to keep young scientists and engineers from leaving academe for industry.

Minorities
The historically black colleges would get more money, but programs designed to help minority-group students attend college would be cut by more than 75 per cent.

Further details on the budget begin on Page 13.

Campuses Face Changes in Policies as States Raise Legal Drinking Ages

20 states have modified laws since 1976, 4 in past year

By ZOÊ INGALLS

As many states around the country raise their minimum drinking ages, some college officials say they are losing their ability to monitor and control use of alcohol by students.

Colleges in states with a drinking age of 19 or 20 are faced with particularly difficult logistical problems because their student bodies are effectively divided in half.

In the last year, four states have raised the minimum drinking age: Connecticut, from 18 to 19; Maryland, from 18 to 21; New Jersey, from 19 to 21; and New York, from 18 to 19.

Altogether, since 1976, 20 states have raised their legal drinking age. At least 14 more are considering such action.

Many college officials contend that the new laws probably do not prevent students from drinking, but that they do restrict the colleges' ability to educate students about proper alcohol use and to continue programs aimed at changing their attitudes and behavior.

Officials say the laws also can curtail attempts to encourage students to drink in such settings as on-campus pubs, which can reduce abusive drinking and the type

Continued on Page 10, Column 1

Fund Cuts Lead Colleges to Hike Fees at Midyear

Hard-pressed institutions in 5 states take rare step

By JACK MAGARRELL

Students at some colleges and universities are discovering this year that the tuition they paid last fall is not the tuition they will have to pay for the winter or spring terms.

Public institutions in at least five states have imposed the unusual tuition increases, in most cases because legislatures have made midyear reductions in their appropriations.

Among recent actions:

▶ Both the University of California and California State University systems have introduced midyear increases in student fees as a result of reductions in the state budget. Most of the increases are effective for this spring.

A $100 increase in student fees at the University of California to offset a $23-million cut in university funds ordered by Gov. George Deukmejian was approved by the university's Board of Regents.

The increase, which goes into effect in the spring quarter, raises undergraduate fees to $1,300 a year and graduate fees to $1,346. It will provide about $12-million, and the rest of the loss in state funds will be made up through a hiring freeze and cuts in programs.

The trustees of the California State University system increased fees by $64 to a total of $514 a year.

▶ In Nebraska, the legislature met in special session last fall because state taxes were not bringing in as much money as had been anticipated when the appropriations for the current year were made. Action to close the gap included a cut of $3.5-million in the appropriations for the University of Nebraska system.

As a consequence, undergraduates in the system are paying 10 per cent more tuition for the spring semester than they did for the fall semester. The extra tuition is expected to make up about $1.2-million of the $3.5-million that was cut from the university budget.

▶ In Virginia, Old Dominion University

Continued on Page 10, Column 1

Women's Basketball Enters a New Era

Coaches of the top-ranked women's collegiate basketball teams are convinced that the quality of play in their sport is now first-rate. Their next chore, however, may be tougher than building teams. They must sell the game to fans and to TV networks.

For details, see the "Athletics" section, which begins on Page 21.

CHRONICLE SURVEY

Sources of Colleges' Income, by Type of Institution

Private institutions

	Share of total revenue, 1981-82			Change from 1980-81 to 1981-82			Projected change, 1981-82 to 1982-83
	Average	High (a)	Low (b)	Average	High (c)	Low (d)	
Ph.D.-granting universities							
Tuition	42.0%	57.1%	26.9%	+15.2%	+16.5%	+13.8%	+13%
Government							
State	0.6%	1.1%	0.2%	−43.5%	−12.7%	−74.4%	− 9%
Federal	10.2%	18.2%	3.5%	−18.2%	− 1.9%	−34.4%	− 1%
Private gifts	7.6%	10.4%	4.7%	− 3.2%	+15.4%	−21.8%	+18%
Endowment income	4.8%	6.9%	2.6%	+18.4%	+23.3%	+13.4%	—
Auxiliary							
Room and board	7.6%	11.3%	3.8%	+ 9.5%	+13.6%	+ 5.5%	+ 7%
Other	5.5%	8.8%	2.3%	+ 9.5%	+14.1%	+14.9%	− 6%
Intercollegiate athletics	3.3%	4.9%	1.7%	+ 5.0%	+19.8%	− 7.8%	—
Total revenue	—	—	—	+ 9.8%	+11.4%	+ 8.2%	+ 7%
Other institutions granting graduate degrees							
Tuition	58.6%	68.3%	49.0%	+13.6%	+17.3%	+10.0%	+11%
Government							
State	2.4%	4.3%	0.5%	+ 2.6%	+35.4%	−30.2%	− 3%
Federal	5.6%	10.2%	0.9%	+14.8%	+64.7%	−35.0%	+24%
Private gifts	7.1%	10.6%	3.6%	+12.3%	+35.5%	−10.9%	−16%
Endowment income	5.3%	9.5%	1.1%	+15.9%	+32.6%	− 0.7%	—
Auxiliary							
Room and board	14.8%	18.5%	11.1%	+10.4%	+15.2%	+ 5.6%	+ 9%
Other	3.6%	5.3%	1.8%	+14.0%	+32.8%	− 4.7%	+21%
Intercollegiate athletics	0.4%	0.9%	0.0%	+ 3.4%	+28.8%	−22.1%	—
Total revenue	—	—	—	+11.3%	+14.3%	+ 8.2%	+ 3%
Selective liberal-arts colleges							
Tuition	47.5%	54.2%	40.9%	+17.8%	+20.8%	+14.9%	+11%
Government							
State	1.1%	1.8%	0.3%	+ 1.7%	+25.6%	−24.8%	− 9%
Federal	2.9%	4.4%	1.4%	0.0%	+23.5%	−23.6%	−15%
Private gifts	9.3%	13.1%	5.8%	+16.7%	+38.2%	− 4.8%	− 1%
Endowment income	14.9%	21.4%	8.4%	− 6.0%	+ 7.0%	−19.2%	—
Auxiliary							
Room and board	14.6%	17.9%	11.2%	+14.9%	+19.5%	+10.3%	+11%
Other	5.3%	7.8%	2.7%	+18.6%	+37.0%	+ 0.1%	+ 4%
Total revenue	—	—	—	+16.4%	+20.9%	+11.9%	+ 3%
Less selective liberal-arts colleges							
Tuition	54.7%	64.7%	44.8%	+14.6%	+22.3%	+ 6.9%	+11%
Government							
State	1.7%	2.8%	0.6%	+ 1.6%	+36.9%	−33.6%	−22%
Federal	5.7%	8.9%	2.6%	− 5.3%	+10.5%	−21.1%	−23%
Private gifts	10.4%	14.4%	6.5%	+ 2.4%	+27.8%	−22.9%	− 4%
Endowment income	5.5%	9.2%	1.8%	+ 4.6%	+22.1%	−12.8%	—
Auxiliary							
Room and board	17.3%	22.3%	12.3%	+ 9.5%	+13.9%	+ 5.0%	+10%
Other	3.5%	5.0%	2.1%	+12.4%	+30.2%	− 5.6%	0.0%
Total revenue	—	—	—	+10.3%	+18.4%	+ 2.2%	+ 6%
2-year colleges							
Tuition	41.8%	50.4%	33.3%	+ 9.6%	+17.6%	+ 1.5%	+11%
Government							
State	1.8%	3.3%	0.3%	+14.5%	+31.7%	− 2.8%	+ 5%
Federal	6.0%	10.2%	1.8%	− 3.8%	+12.7%	−20.2%	− 7%
Private gifts	17.0%	24.7%	9.3%	+35.5%	+58.6%	+12.3%	−12%
Endowment income	5.7%	10.1%	1.3%	− 1.1%	+ 9.4%	−11.6%	—
Auxiliary							
Room and board	19.2%	22.1%	16.4%	+ 9.9%	+15.6%	+ 4.3%	+ 8%
Other	3.8%	5.8%	1.8%	+ 6.9%	+29.1%	−15.3%	+ 4%
Total revenue	—	—	—	+13.4%	+16.3%	+10.5%	+ 3%
All private institutions							
Tuition	51.2%	60.8%	41.7%	+13.7%	+19.7%	+ 7.7%	+11%
Government							
State	1.7%	3.0%	0.5%	+ 2.0%	+31.3%	−21.7%	−10%
Federal	5.7%	9.5%	2.0%	− 0.8%	+23.3%	−24.9%	− 7%
Private gifts	10.8%	15.4%	6.3%	+12.8%	+36.4%	−10.7%	− 7%
Endowment income	6.5%	10.7%	2.3%	+ 5.5%	+20.0%	− 9.1%	—
Auxiliary							
Room and board	16.3%	20.3%	12.3%	+10.4%	+15.1%	+ 5.6%	+ 9%
Other	3.9%	5.8%	2.1%	+12.1%	+30.3%	− 5.7%	+ 5%
Intercollegiate athletics	0.3%	0.5%	0.1%	+ 1.1%	+ 7.3%	− 5.2%	—
Total revenue	—	—	—	+11.8%	+16.9%	+ 6.7%	+ 4%

Public institutions

	Share of total revenue, 1981-82			Change from 1980-81 to 1981-82			Projected change, 1981-82 to 1982-83
	Average	High (a)	Low (b)	Average	High (c)	Low (d)	
Ph.D.-granting universities							
Tuition	15.9%	22.9%	8.8%	+16.0%	+22.8%	+ 9.3%	+10%
Government							
State	44.8%	53.1%	36.5%	+ 6.9%	+13.6%	+ 0.3%	+ 5.%
Federal	10.0%	14.2%	5.8%	− 2.3%	+ 4.3%	− 8.8%	5%
Local	0.5%	1.1%	0.0%	+ 0.2%	+35.6%	−35.2%	− 1%
Private gifts	2.9%	4.4%	1.5%	+16.8%	+34.2%	− 0.7%	+ 8%
Endowment income	0.6%	1.1%	0.0%	+10.4%	+31.8%	− 0.7%	—
Sales and services	2.7%	4.6%	0.8%	+ 9.7%	+20.8%	− 1.4%	+ 2%
Other general sources	3.3%	4.8%	1.9%	+36.9%	+81.9%	− 8.1%	+ 6%
Auxiliary							
Room and board	8.9%	12.5%	5.4%	+10.2%	+15.4%	+ 4.9%	+ 4%
Other	6.6%	9.9%	3.3%	+ 8.1%	+17.3%	− 1.1%	+11%
Intercollegiate athletics	1.7%	2.8%	0.7%	+19.7%	+12.9%	+ 6.3%	—
Total revenue	—	—	—	+ 9.6%	+12.9%	+ 6.3%	+ 5%
Comprehensive institutions (e)							
Tuition	22.2%	31.6%	12.8%	+15.7%	+25.9%	+ 5.4%	+10%
Government							
State	56.3%	64.0%	48.5%	+ 9.9%	+18.2%	+ 1.5%	+ 7%
Federal	5.4%	8.3%	2.5%	+ 8.0%	+38.5%	−22.5%	+ 8%
Local	0.7%	1.5%	0.0%	− 5.9%	+26.5%	−40.4%	+ 5%
Private gifts	1.1%	1.9%	0.3%	+ 2.9%	+33.1%	−27.2%	+39%
Endowment income	0.5%	1.1%	0.0%	− 2.7%	+15.1%	−20.4%	—
Sales and services	1.6%	2.9%	0.3%	+19.3%	+36.3%	+ 2.4%	− 7%
Auxiliary							
Room and board	9.9%	15.2%	4.7%	+10.8%	+18.0%	+ 3.6%	+14%
Other	6.6%	9.9%	3.2%	+10.9%	+27.3%	− 5.5%	+25%
Intercollegiate athletics	1.0%	1.5%	0.5%	+ 6.5%	+27.0%	− 1.0%	—
Total revenue	—	—	—	+ 9.1%	+13.8%	+ 4.5%	+ 8%
2-year colleges							
Tuition	19.7%	25.8%	13.6%	+14.5%	+23.6%	+ 5.4%	+ 9%
Government							
State	46.9%	64.0%	30.0%	+ 6.8%	+13.3%	+ 0.4%	+ 2%
Federal	5.6%	8.5%	2.7%	− 7.7%	+16.7%	−32.1%	+ 2%
Local	19.5%	31.2%	7.8%	+14.9%	+30.8%	− 2.0%	+ 6%
Private gifts	0.6%	1.0%	0.1%	+25.1%	+60.9%	−10.6%	+ 6%
Total revenue	—	—	—	+ 9.1%	+12.8%	+ 5.4%	+ 6%
All public institutions							
Tuition	20.0%	26.9%	13.0%	+14.9%	+24.1%	+ 5.7%	+ 9%
Government							
State	49.1%	63.0%	35.3%	+ 7.6%	+14.6%	+ 0.7%	+ 3%
Federal	5.9%	8.9%	2.9%	− 3.2%	+21.2%	−27.6%	+ 4%
Local	13.0%	21.0%	5.1%	+ 8.0%	+30.1%	−14.7%	+ 5%
Private gifts	0.9%	1.5%	0.3%	+18.7%	+51.4%	−14.0%	+15%
Endowment income	0.2%	0.4%	0.0%	+ 0.2%	+ 6.6%	− 5.3%	—
Sales and services	0.6%	1.1%	0.2%	+ 5.8%	+11.1%	+ 0.5%	− 2%
Other general sources	0.3%	0.4%	0.2%	+ 3.2%	+ 7.0%	− 0.7%	+ 1%
Auxiliary							
Room and board	3.3%	5.0%	1.7%	+ 3.6%	+ 5.9%	+ 1.3%	+ 4%
Other	2.3%	3.4%	1.1%	+ 3.5%	+ 8.5%	− 1.5%	+ 7%
Intercollegiate athletics	0.4%	0.6%	0.2%	+ 3.4%	+ 7.0%	+ 0.3%	—
Total revenue	—	—	—	+ 9.1%	+13.1%	+ 5.2%	+ 6%

— Not applicable or data insufficient for reliable estimate.

(a) At about one-fifth of the institutions, the share of total revenue was higher than the "high" percentage (mean percentage plus one mean deviation).

(b) At about one-fifth of the institutions, the share of total revenue was lower than the "low" percentage (mean percentage minus one mean deviation).

(c) About one-fifth of the changes were higher than the "high" percentage (mean increase plus one mean deviation).

(d) About one-fifth of the changes were lower than the "low" percentage (mean change minus one mean deviation).

(e) Institutions with more than 1,500 students, a liberal-arts program, and at least one professional program.

Note: Survey data are based on responses from a stratified random sample of 150 private institutions and 150 public institutions. The approximate response rates were 90 per cent for 1981-82 data and 70 per cent for 1982-83 projections. Because the 1982-83 projections are based on a smaller number of responses, they should be regarded as less reliable than the data for 1981-82. Data for "all public institutions" and "all private institutions" are weighted according to the distribution of institutions by type. Technical inquiries about the survey design and sampling techniques should be addressed to John Minter Associates, P.O. Box 107, Boulder, Colo. 80306.

SOURCE: SURVEY FOR THE CHRONICLE BY JOHN MINTER ASSOCIATES

Tuition Revenue Increased 14 Pct. at Private Colleges in 1981-82, Survey Finds

Private colleges and universities increased their tuition revenue in the 1981-82 academic year by an average of nearly 14 per cent, according to the Chronicle Survey's latest study of higher-education finances.

Most of the increase in tuition revenue resulted from an increase in rates over those of 1980-81, but for some institutions an increased number of students added to the higher income from tuition.

Revenue from charges for board-and-room at the private institutions increased by an average of 10 per cent in 1981-82, while funds from private gifts increased about 13 per cent.

Tuition payments in 1981-82 accounted for 51 per cent of the private institutions' revenue and 20 per cent of the public institutions' revenue, according to the survey.

Total revenue for 1981-82 was up 9 per cent over the previous year's total at public institutions and up nearly 12 per cent at private institutions.

Public institutions, on the average, reported getting 3 per cent less federal money than they had the year before. Federal funds accounted for an average of 6 per cent of their revenue. State funds, which provided 49 per cent of the public institutions' total revenue, increased in 1981-82 by an average of more than 7 per cent.

Private colleges and universities, which got less than 6 per cent of their revenue from the federal government, reported an average decline of less than 1 per cent in those funds in 1981-82, while their state funds—less than 2 per cent of the total—increased by 2 per cent.

The survey of college and university finance was conducted for *The Chronicle* by John Minter Associates of Boulder, Colo., a research organization that specializes in higher-education studies. Data for the survey are based on responses from a sample of 300 institutions.

Projections by institutions in the national sample of revenue for the current fiscal year show that public institutions expected an average increase of 6 per cent over 1981-82 revenue. Private institutions expected an average increase of 4 per cent.

The private colleges and universities projected an average increase of 11 per cent in revenue from tuition and an increase of 9 per cent in revenue from board-and-room, but they expected revenue from private gifts to decline by 7 per cent.

The public institutions projected increases of 9 per cent in tuition revenue and 4 per cent in board-and-room revenue. They projected an increase of 15 per cent in revenue from private gifts. Such gifts accounted for 1 per cent of the public institutions' total revenue, compared with 11 per cent of the private institutions' total.

Drinking Policies

Continued from Page 1

of actions that can lead to property damage and injuries.

During the past decade, state drinking ages—and hence college policies—have changed dramatically.

In the early 1970's, "old enough to fight, old enough to vote" was the rallying cry as 18-year-olds sought to lower the legal voting age. The Constitution was amended in 1971. Then "Old enough to vote, old enough to drink" became the rallying cry, and young people flexed their newly won political muscle to persuade state legislatures to lower the minimum legal drinking age as well.

Twenty-nine states responded—most of them by lowering the age to 18. The result, according to dozens of studies, was a steep increase—some say as high as 25 per cent—in the proportion of traffic accidents involving young drivers.

Largely as a result of that increase, coupled with a desire to reduce the availability of alcohol to high-school students, state legislatures began to reverse themselves. New studies showed that raising the drinking age reduced traffic accidents and fatalities, as much as 31 per cent.

Efforts to raise the age have been given new impetus in the last two years by the emergence and growing influence of grassroots groups like Mothers Against Drunk Driving. Now, the push is on not just to raise the age, but to raise it to 21 in all states.

'Grandfathering'

Both Maryland and New Jersey are raising their minimum age to 21 in stages, a process known as "grandfathering." In Maryland, for example, anyone who was 18 as of June 30, 1982, may still drink; anyone younger will not be able to drink legally until he or she turns 21.

"If all of a sudden everyone were under age, it would have made things a lot easier," says Drury G. Bagwell, assistant vice-chancellor for student affairs at the University of Maryland. He says the university is now working on changes in its policies for next year—the year that "has the worst potential" for logistical problems, because about half of the student body will be able to drink legally and half will not.

Many colleges already have had to deal with the type of problem Mr. Drury and his colleagues at Maryland will face.

In 1979, when the drinking age went from 18 to 20 in Massachusetts, Harvard College made the decision to stop serving alcohol at all public functions. "Our rationale was, we did not want to risk having minors served and didn't want to divide the college by carding, so the simplest solution seemed to be not to have it at all," says Archie C. Epps, dean of students.

After Rhode Island raised its drinking age from 18 to 20 in 1981, Brown University officials took the opposite tack: Underage students may attend parties where alcohol is being served, but party sponsors are responsible for checking I.D.'s.

Brown, which has been a leader in developing alcohol-education and alcohol-abuse-prevention programs, is also managing to adapt many of those programs to solve problems created by the higher drinking age. It is a matter of longstanding policy at Brown that whenever alcoholic beverages are served at a party, nonalcoholic beverages must be served as well. "That's the letter of the law," says John M. Robinson, dean of students.

But students are encouraged to go one step further and serve non-alcoholic beverages in a way that "those who don't want to drink alcohol are not inhibited," or made to feel as if they stand out, he says.

"For example, suppose most students are drinking champagne out of goblets. In that case, you don't make available a few cans of Coke. Instead, you might serve sparkling apple juice in the same glasses."

That approach evolved as part of an effort to create a less pressured atmosphere when all students were of legal age, Mr. Robinson says, but it serves equally well to make underage partygoers feel comfortable.

One concern expressed repeatedly by college administrators is that the change in the drinking age puts them in the role of policemen—at least in the minds of many students—and results in an undesirable adversarial relationship. "It's a bad side effect, and something we fear," says Mr. Robinson of Brown. "Students here feel they can talk with administrators and faculty. We don't want a situation where students feel they have to hide from us—not invite us to parties or have a spy at the door so they can hide the keg as soon as they see us coming."

In the four states that raised their minimum drinking ages in 1982, colleges have taken a variety of steps to insure that their students comply with the new laws. For example:

▶ At Goucher College in Maryland, students planning to serve alcohol at parties must get permission from the office of the dean of students. That office hires two students, not connected with the party, to check identification cards at the door. All student I.D.'s at Goucher include the student's date of birth, and all are color-coded to indicate whether the student is of legal drinking age. The college also requires party hostesses to hire professional bartenders who have been screened by the dean's office. Students also must buy all wine and beer to be served at the party from the college's food service, which regulates the amount that can be purchased.

▶ At the University of Maryland, outdoor mixers have been abolished. Students who want to use public spaces such as dormitory lounges for parties must get approval from the campus-activities office, which makes sure that access to the event can be controlled and that adequate provisions have been made to check I.D.'s at the door.

▶ In dormitories at the University of Connecticut, alcoholic beverages can only be served in ground-floor lounges, where access can be monitored. No more than 10 students are allowed in a double room at a time, to prevent them from moving parties from lounges into their rooms.

▶ At Skidmore College in New York, where the drinking age was changed for the first time since the repeal of Prohibition, alcohol is permitted at college events only on a cash-per-drink basis. Students' identification cards are punched with holes if they are under age. Students must get permission to have a keg of beer at parties held in dormitories.

In most cases, campus officials say that they will monitor only public gatherings and will place heavy emphasis upon the responsibility of individual students for what goes on in their rooms.

Teaching Drinking?

College officials agree—and studies back them up—that most students have drunk alcohol before they come to college and that they will continue to drink while in college, whether they have reached the legal age or not.

But the new state laws can hamper colleges in several ways. "We lose our capacity to insist that [certain] things be done," says William David Burns, director of health services at Rutgers University.

With the drinking age at 21, even alcohol-education programs are suspect as being tantamount to condoning illegal behavior, he says. "People have a kneejerk reaction: 'Why don't they teach them how to write rather than teaching them how to drink?' "

At the University of Massachusetts at Amherst in 1979, when the state's drinking age jumped from 18 to 20, "parties switched from controlled, on-campus sites to other, uncontrolled sites," says Carlene V. Riccelli, coordinator of alcohol education. Students began gathering off the campus or at smaller parties in dormitory rooms, she says, and "drinking became more of the focus."

Officials at the University of Florida report a similar experience when the drinking age in the state was raised to 19 in 1980. "Drinking moved from one setting to another—there was more drinking in fraternities, for example," says Gerardo M. Gonzalez, director of the university's alcohol information center.

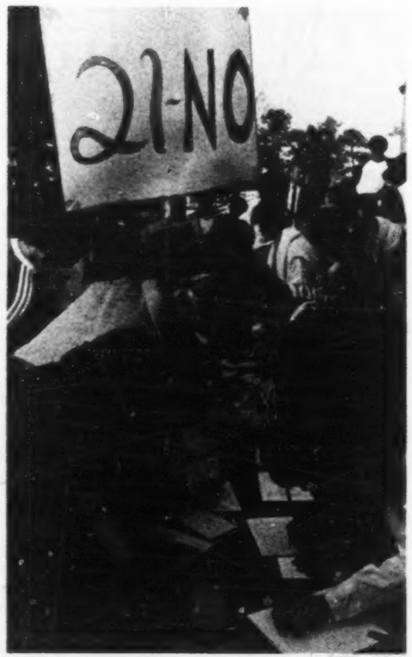
Some college officials say they are frustrated. "How can you deal with inappropriate use if you can't deal with use?" says Gail G. Milgram, an associate professor in Rutgers University's Center of Alcohol Studies. "The drinking will simply move elsewhere, but the law is minimizing our ability to minimize risks."

In recent years, there has been a growing concern on college campuses about the incidence of alcohol-related problems such as vandalism and violent behavior. Although the effects of a higher drinking age on such problems have not been studied extensively, most college officials interviewed by *The Chronicle* reported no significant reduction in those problems, and a few noted increases in the incidence of vandalism.

Some officials say they are particularly concerned about drunk driving by students who travel to neighboring states with lower drinking ages.

"We're five miles from D.C. [the District of Columbia, where the drinking age is 18 for beer and wine]," says Mr. Bagwell of the University of Maryland. "The new law will create a lot of drinking-and-driving problems for us."

Minimum Legal Drinking Ages



MIKE BARKIN

Georgia students hold rally and petition legislators not to raise the drinking age.

Age 18
Hawaii (1972)
Louisiana (1948)
Vermont (1971)
●West Virginia (1980)
●Wisconsin (1972)

Age 19
Alabama (1970)
Alaska (1979)
Arizona (1972)
● Connecticut (1982)
● Florida (1980)
● Georgia (1980)
● Idaho (1972)
● Iowa (1978)
Minnesota (1976)
Montana (1979)
New York (1982)
●Tennessee (1979)
●Texas (1981)
●Wyoming (1973)

Age 20
●Delaware (1972)
Maine (1977)
Massachusetts (1979)
● Nebraska (1980)
New Hampshire (1979)
Rhode Island (1981)

Age 21
Arkansas (1925)
California (1933)
▲Colorado (1945)
District of Columbia (1934)
▲Illinois (1980)
Indiana (1934)
▲Kansas (1949)
Kentucky (1938)
Maryland (1982)
Michigan (1978)
▲Mississippi (1966)
Missouri (1945)
Nevada (1933)
New Jersey (1982)
New Mexico (1934)
▲North Carolina (1935)
North Dakota (1936)
▲Ohio (1935)
●▲Oklahoma (1976)
Oregon (1933)
Pennsylvania (1935)
▲South Carolina (1935)
▲South Dakota (1972)
Utah (1935)
● ▲Virginia (1981)
Washington (1934)

▲ Lower age for some kinds of wine and beer

● States with bills introduced to raise age

Note: Dates in parenthesis indicate when age was enacted.

SOURCE: NATIONAL SAFETY COUNCIL AND NATIONAL TRANSPORTATION SAFETY BOARD

Some Colleges Hike Fees at Midyear

Continued from Page 1

raised its tuition rates 5 per cent for the spring semester after its budget suffered a double reduction—a cut of $1.5-million in state funds and a loss of $429,000 in tuition revenue because of a 4-per-cent drop in enrollment last fall. The midyear tuition increase—unprecedented, university officials said—is expected to raise about $400,000 toward balancing the university budget.

▶ In Illinois, Gov. James R. Thompson took away in December $7.1-million of the appropriations approved last summer for the University of Illinois for this fiscal year.

The university's trustees voted a midyear increase in tuition amounting to $100 per semester at the Urbana-Champaign campus and $50 per quarter at the Chicago campuses. The increase is expected to raise about $4-million this year.

To save another $2-million, the Illinois board delayed until April a 3-per-cent salary increase for faculty and staff members—a raise that already had been delayed from last fall until January.

▶ In Louisiana, Southern University raised its tuition rates in January, but not because of any unexpected reduction in state funds. Tuition was the only source available, officials said, for money for salary increases, fixing leaky roofs, and other expenses that state funds did not cover.

The increase in tuition for this year's second semester at Southern was $50 for students on the New Orleans and Baton Rouge campuses and $30 for those at Shreveport.

In an attempt to offer students at least a brief period of stability in an era of rate increases, Springfield College in Massachusetts has announced a "freeze" on both tuition (now $4,500 a year) and board and room (now $2,380) through the 1983-84 academic year.

Springfield officials said that they hope to increase the college's tuition revenue next year by adding 90 more students to the current enrollment of 2,200.

Judge Bars Illinois Budget Cutback

CHICAGO

An Illinois judge has issued a preliminary injunction barring Gov. James Thompson from cutting the current state budget to avoid a projected shortfall in revenue.

The cuts, which included a $20-million reduction in spending for higher education, were to have taken effect February 1.

In issuing the order, the judge ruled that state legislators had violated the Illinois constitution when they authorized the governor to make the cuts.

The constitution gives sole authority on budgetary matters to the legislature.

The order came in a lawsuit filed on behalf of recipients of state medical assistance. The state affiliate of the American Federation of Teachers (A.F.L.-C.I.O.) had filed a similar lawsuit on behalf of teachers.

Note Pad

Soon after George A. Keyworth, II, President Reagan's science adviser, delivered the Administration's fiscal 1984 budget request to Congress, he came down with the flu.

But that did not prevent him from keeping his promise to discuss the Administration's science budget last week at a hearing of the House Science and Technology Committee.

Pleased that the ailing Mr. Keyworth had shown up, Rep. Don Fuqua, Democrat of Florida and chairman of the committee, asked Congressmen to limit their questions to allow Mr. Keyworth the chance to leave early.

However, Rep. George E. Brown, Jr., Democrat of California, was unsympathetic. He was unhappy with the Administration's proposed cuts in agricultural research and some energy programs for fiscal 1984, and commented, "When I get through with my questions, Mr. Keyworth will feel even more ill."

▪

The plan proposed by a bipartisan commission last month to reform the Social Security system is getting intense scrutiny on Capitol Hill these days.

And it is apparently getting just as intense study in the Social Security Administration. A caller last week asked the agency for a breakdown on how much the Reagan Administration estimated would be spent in fiscal 1984 for Social Security benefits paid to college students who are the dependents of retired or deceased Social Security recipients.

"Um, we will have that figure—probably in a couple weeks," an official said. "We can't get it sooner because all our actuaries are busy calculating the effects of the Social Security proposals."

▪

Several hotels constructed near Capitol Hill in recent years have become favorite meeting places for education and other groups that like the proximity to the action in Congress.

But the site of its annual meeting in the Hyatt Regency Hotel near the Capitol was a mixed blessing last week for the Association of Catholic Colleges and Universities.

Participants who were trying to attend an afternoon session found the hotel surrounded by police lines that held back thousands of soggy but enthusiastic football fans.

An officer explained to one convention-goer that a reception for the Washington Redskins was under way inside. The crowd, he said, had followed the Super Bowl champions to the hotel at the end of the rain-soaked victory parade on Constitution Avenue.

Another officer escorted the determined conventioneer through the crowd, past the police motorcycles and dignitaries' limousines, and into the hotel. There he found ice sculptures of the Redskins' Indian by the escalators, and flashbulbs popping all around. Somehow, the association's afternoon session, a discussion of "Current Legal Issues in Church-Related Higher Education," seemed tame by comparison.

Washington

Reagan Seeks Major Student-Aid Changes, More Funds for Science in 1984 Budget

By CHERYL M. FIELDS

WASHINGTON

President Reagan's fiscal 1984 budget calls for a major restructuring of federal aid to students and substantial increases in support for science education and selected areas of scientific research, including the physical sciences and engineering.

It proposes a savings plan to encourage parents to put money aside for their children's college education.

It recommends significant changes in the way the government reimburses teaching hospitals for their care of elderly patients and would limit the amount of tax-free health insurance employers can provide for their employees.

And it would cut federal support in half for one of the most popular programs designed to encourage educational innovation, the Fund for the Improvement of Postsecondary Education.

Aside from those initiatives, however, the President's requests for education, health, and other programs affecting colleges and universities strongly echo his previous two budgets.

Mr. Reagan selects many of the same programs for cuts or elimination that he has singled out in the past. In some cases, however, he is seeking smaller reductions than he has previously—probably in recognition of the fact that Congress has consistently refused to reduce education and social programs as much as he has urged.

The President again recommends cuts in financing for health-professions education, the arts and humanities endowments, and several small, special-purpose college-aid programs. But, for example, instead of the 50-per-cent and 30-per-cent reductions he called for in his previous two budgets for the National Foundation on the Arts and the Humanities, this year he is requesting a 13.2-per-cent reduction for the arts agency and a 17-per-cent cut for humanities.

As soon as the President's $848.5-billion federal budget reached Capitol Hill, many Democrats and Republicans said Mr. Reagan's requests again will undergo substantial revision. But, said Sen. Lawton Chiles, Democrat of Florida and the ranking Democrat on the Senate Budget Committee, "This budget will not be dismissed out of hand like the last budget was."

Budget Stories on Other Pages

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▪ Education savings accounts ... Page 18
▪ Other programs .... Page 19

A table giving budget figures for higher-education programs appears on Page 14.

He and other lawmakers praised the President for basing this year's budget on more realistic economic projections than he had used in the past.

On the other hand, many legislators also said they believe domestic programs have been cut about as much as they can be realistically. Rep. Silvio Conte, Republican of Massachusetts and ranking minority member of the House Appropriations Committee, told Administration officials at a hearing last week that domestic programs already "have taken their lumps."

The President's defense budget—which calls for a $30.5-billion increase in spending in fiscal 1984—is the prime candidate for substantial reductions, according to many lawmakers. That increase would be about 10.3 per cent even after the 5-per-cent rate of inflation that Mr. Reagan projects in fiscal 1984 was taken into account. Fiscal 1984 begins October 1.

Said Representative Conte at the appropriations hearing, "There will be a hell of a shift from defense to social programs, no doubt about it."

In contrast to the defense budget, the President's overall request for education, training, employment, and social services programs would drop about 5 per cent in fiscal 1984, from $26.7-billion in the current fiscal year to $25.3-billion.

The budget for the Education Department would drop 8 per cent, from nearly $15.1-billion this year to about $13.2-billion in 1984. In addition, the President wants Congress to rescind $1.2-billion of the $15.1-billion it has appropriated for the current year for the agency. Last year, however, Congress rejected the Administration's request to cut $3-billion from the Education Department's budget and also rejected all of its numerous requests to rescind funds for education programs.

Education Secretary Terrel H. Bell defended the $13.2-billion request, pointing out that it was more than the $9-billion the Administration said last year it would probably request in fiscal 1984. That is "quite a significant difference," he said, and was necessary "largely because of the depth of the recession."

"Knowing that local and state education agencies and college students are being hit hard, we felt we needed a stronger budget," he said.

Reform Proposal Aims at Promoting Student 'Self-Help'

By JANET HOOK

WASHINGTON

College students would be required to pay at least 40 per cent of their education costs before they qualified for a federal grant, under proposals designed to reform student aid in President Reagan's budget for the coming fiscal year.

Students attending expensive colleges would have to come up with even more than 40 per cent.

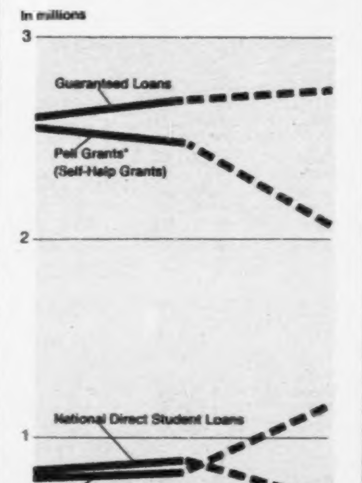
The reform plan is designed to promote what the Administration calls "self-help" by students: working and taking out loans to help pay for their own higher education.

The money students receive from federal loan and work-study programs could be used to meet the minimum "self-help" requirement under the plan, which the Administration proposed to insure that parents and students assume the primary responsibility for paying for college.

"Students and their parents ought to do

Continued on Page 18, Column 1

Student-Aid Awards



Science Funds Up, Reflecting Worry over Future Talent

By KIM McDONALD

WASHINGTON

When President Reagan met with his advisers last fall to discuss ways to improve the nation's industrial capability, the discussions "always came down to one lowest common denominator," says George A. Keyworth, II, Mr. Reagan's science adviser. "That was, 'We have to worry about tomorrow's scientific talent.' "

That view has led to the handsome increases the President has proposed for many fields of basic scientific research.

The President's budget seeks to increase support for basic research from $6-billion this year to $6.6-billion in fiscal 1984, an increase of 10 per cent, or 5 per cent after the expected rate of inflation is taken into account.

In fiscal 1983, which began last October 1, spending for basic research is expected to increase by nearly 10 per cent over 1982, or about 4.7 per cent after inflation. But

Continued on Page 16, Column 4

White House Hopes Savings Plan Will Curtail Student-Aid Spending

WASHINGTON

President Reagan's proposal to provide tax breaks for parents who save for their children's college education would cost the federal treasury as much as $1-billion by the end of the decade, but Administration officials hope the plan will eventually curtail federal spending for student financial aid.

"The longer people are encouraged to save, the more they will have to spend on their children's education, and the less federal subsidy they will need," says Gary L. Jones, Under Secretary of Education.

The savings incentives are a key element in the Administration's effort to encourage families to take a "more active part in financing college costs," says Education Secretary Terrel H. Bell.

$1,000 a Year

Under the Administration's proposal, parents would be allowed to deposit up to $1,000 a year for each child in special savings or investment accounts. Deposits would not be tax-deductible, as they are under Individual Retirement Accounts, but interest and dividends earned in the accounts would be tax exempt.

If parents deposited $1,000 a year in an account earning 7.5-per-cent interest, Education Department officials said, they would double their investment in 10 years. Neither the $10,000 in savings nor the $10,000 in interest would be taxed when it was withdrawn if the money were used for "legitimate" college expenses.

According to Administration estimates, the cost to the federal treasury would be negligible in fiscal 1984 and $100-million in 1985, rising to $1-billion in lost revenue by 1989.

Although legislation setting out the complete savings proposal has not yet been drafted, budget documents released last week provided some details about how the accounts would work.

Parents earning more than $60,000 a year would not be able to establish the education accounts, and the full benefits of the savings-incentive program would be available only to parents earning less than $40,000 a year.

Lower Ceiling for Some

Taxpayers who earn between $40,000 and $60,000 a year would be able to establish the special accounts, but would not be able to deposit the full $1,000 a year. The ceiling on their annual deposits would be tied to their income.

Deposits could be made only while children are under the age of 18, and the money would have to be used before they turned 26. If the money was not used for college expenses when it was withdrawn, the interest would be taxed and a penalty would be charged.

According to budget documents, the money would have to be used to pay for tuition, room, or board for a full-time undergraduate student. Withdrawals would have to be reported to the Internal Revenue Service by the bank and the taxpayer, and colleges would have to verify the use of the funds.

—JANET HOOK

Reagan's Aid-Reform Plan Aims at Promoting Student 'Self-Help'

Continued from Page 13

as much as they can before we offer federal assistance," said Education Secretary Terrel H. Bell.

The Administration's proposals would, in effect, require needy students to draw first on federal work-study and loan programs, and allow them to receive grants only if other sources of aid were insufficient.

That would reverse the priorities of the existing student-aid system, in which the Pell Grant is regarded as the basic source of aid, to which loans and work-study are added if more help is needed.

Other provisions of the proposed overhaul of federal student-aid policy would:

▶ Reduce the number of grant programs from three to one.

▶ Increase grants to the poorest students—particularly those attending more expensive colleges.

▶ Reduce or deny grants to most middle-income students.

Last year, the Administration stirred heated controversy when it asked Congress—in vain—to make deep cuts in the student-aid budget. In contrast, the fiscal 1984 budget proposed by President Reagan last week recommends no major reductions in total student-aid spending—although it asks Congress to make a significant shift in the allocation of those funds.

"This year we're not challenging them on the budget, we're challenging them on policy," said Gary L. Jones, Under Secretary of Education. "The public debate now will be focusing on the pros and cons of policy as opposed to draconian cuts."

However, Congress may be reluctant to make major structural changes in student-aid law this year, on the heels of the many reforms and budget cuts approved in recent years.

"We've seen significant cuts in financial aid and changes in the way aid is distributed in the past three years," said Sen. Robert T. Stafford, Republican of Vermont and chairman of the Senate education subcommittee. "It is time to put a stop to these perpetual disruptions and finally give parents and students some sense of stability as they plan their education financing."

The Administration's reform plan also faces opposition from Rep. Paul Simon, Democrat of Illinois and chairman of the House Subcommittee on Postsecondary Education, and his aides predict that the proposals will "go nowhere" in Congress this year.

Even if Congress did approve the Administration's proposals, most would not affect students' grants and loans until the 1984-85 academic year.

$5.6-Billion for Student Aid

The President requested a student-aid budget of $5.6-billion for fiscal 1984, compared to the $5.8-billion expected to be spent this year. But the Administration's spending plan includes no money for Supplemental Educational Opportunity Grants and State Student Incentive Grants. The one remaining grant program—Pell Grants—would be renamed "self-help" grants.

Under the new program, students would be eligible for a grant only if they paid for at least 40 per cent of their education costs—or a minimum of $800—through job earnings and loans.

The proportion of education costs that would have to be met by the student would increase at higher cost institutions. So, for example, students attending a college costing $7,200 would be required to borrow or earn $4,200, or 58 per cent of their expenses.

Although many colleges already require students to make a minimum contribution, Administration officials say their proposal is designed to insure that all students are required to do so.

The Administration estimates that 82 per cent of the new grants would be awarded to students whose families earn less than $12,000 a year. This year, about 74 per cent of the money spent on Pell Grants went to such students.

The maximum "self-help" grant available would be $3,000—up from the $1,800 limit on Pell Grants. However, students now may also receive up to $2,000 in supplemental grants, which would not be available under the Reagan plan.

The maximum $3,000 grant would be available only to the neediest students attending colleges costing about $7,000 or more.

Department officials said the overall effect of the new program would be to give the poorest students larger grants than they would receive under the Pell Grant program and to provide proportionately more money to students at expensive private colleges.

However, to meet the "self-help" requirement, even poor students at expensive colleges would have to contribute more than 40 per cent of their costs before they qualified for the larger grant.

To help students meet "self-help" requirements, the Administration has proposed increasing campus job opportunities by boosting work-study funds from $540-million to $850-million.

The Administration also would require families to contribute more toward their children's education. Students' families would be required to contribute 18 per cent or more of their discretionary income toward college costs before their children can qualify for a grant. Under the Pell Grant program, families are expected to contribute at least 11 per cent of their discretionary income.

Underlying the Administration's policy is the belief that increases in federal financial aid in recent years have eroded the sense of responsibility students and their families feel for financing a college education.

"Federal support has become so prominent that well-informed financial-aid officers are encouraging students and parents to look first to federal resources before they look to other resources," said Mr. Jones.

According to Education Department analysts, the proportion of college costs paid by families declined from 40.2 per cent in 1978 to 31.2 per cent in 1980. However, a recent study financed by the National Institute of Education questioned that conclusion.

Larry L. Leslie, director of the Center for the Study of Higher Education at the University of Arizona, concluded that the share of college costs paid by families increased from 42 per cent in 1973 to 47.6 per cent in 1980. But Mr. Leslie also found that students' contribution to college costs had declined from 28 to 18 per cent.

Other Aid Proposals

In other areas of the student-aid budget, the President proposed:

▶ Providing no new money for National Direct Student Loans, although colleges would still be able to make loans to their students with money collected from previous borrowers. The Department of Education estimates colleges would make $550-million in direct loans in the 1984-85 academic year, down from the $684-million expected to be available next year.

▶ Requiring all students to demonstrate financial need before they qualify for a Guaranteed Student Loan. Now, only students from families earning more than $30,000 a year have to show need.

▶ Requiring graduate and professional students to pay a 10-per-cent fee on guaranteed loans—double the fee now charged all borrowers.

The Administration has dropped some of the most controversial proposals it advanced last year to curtail the growing cost of student loans—including a proposal to sharply reduce federal subsidies for graduate students.

Pressure to cut back on student loans has abated, because declining interest rates have substantially reduced the cost of the program over the past year. The Education Department expects the loans to cost only $2.2-billion in fiscal 1983—down from their $3.07-billion price tag in fiscal 1982. Based on the department's revised cost estimate, the President has asked Congress to rescind $900-million of the $3.1-billion it has appropriated for the loans this year.

'Much More Interesting'

Student-aid analysts said it was difficult to project the overall effects of the Administration's wide-ranging student-aid proposals.

"We'll have to see what the details are," said Lawrence E. Gladieux, executive director of the College Board's Washington office. "But it's much more interesting and worthy of consideration than what the Administration has proposed in the last two years."

However the details are worked out, analysts agree, the Administration's proposals raise fundamental questions about which forms of federal aid should be given priority, whether students can and should work and borrow more, and whether existing programs should be recast to provide proportionately more money to students attending more expensive colleges.

The National Association of Independent College and Universities, which met here last week, has been considering ways of restructuring federal aid programs to provide additional relief for students attending private institutions, and has long advocated raising the limit on Pell Grants.

But Peter J. Gossens, director of governmental relations for the independent-college group, said that although the Administration's proposal to provide larger "self-help" grants would help students at private colleges, that increase would not make up for the loss of other forms of assistance, such as supplemental grants.

Dallas Martin, executive director of the National Association of Student Financial Aid Administrators, contended that, although the Administration's proposals to reduce the number of grant programs would simplify student-aid calculations, it might make it more difficult for campus officials to meet the needs of students in unusual circumstances.

For example, Mr. Martin said, many campus officials now use supplemental grants to help students whose financial need is not accurately measured by the rigid formula used to award Pell Grants.

How 'Self-Help' Plan Would Affect Pell Grants

At High-Cost Colleges ($7,500 per Year)			At Medium-Cost Colleges ($4,400 per Year)			At Low-Cost Colleges ($2,500 per Year)		
Family income	Current maximum	Reagan proposal	Family income	Current maximum	Reagan proposal	Family income	Current maximum	Reagan proposal
$10,000	$1,800	$3,000	$10,000	$1,800	$2,300	$10,000	$1,250	$1,500
12,000	1,600	2,675	12,000	1,600	1,975	12,000	1,250	1,175
15,000	1,340	2,250	15,000	1,340	1,550	15,000	1,250	750
20,000	820	1,440	20,000	820	740	20,000	820	0
25,000	200	550	25,000	200	0	25,000	200	0

SOURCE: U.S. DEPARTMENT OF EDUCATION

FACT–FILE

Funds for Higher Education Programs in President Reagan's Budget for 1984

In the Department of Education

	Fiscal 1982 Actual	Fiscal 1983 Estimated	Fiscal 1983 Supplemental (+) & rescissions (−)	Fiscal 1984 Requested
Student assistance:				
Pell Grants	$2,419,040,000	$2,419,040,000	0	$2,713,800,000
Supplemental grants	355,400,000	355,400,000	0	0
College Work-Study	528,000,000	540,000,000	0	850,000,000
State Student Incentive Grants	73,680,000	60,000,000	0	0
National Direct Student Loans	178,560,000	178,560,000	0	0
Guaranteed Student Loans	3,073,846,000	3,100,500,000	−900,000,000	2,047,100,000
National student-aid commission	960,000	840,000	0	0
Graduate support:				
Graduate and professional opportunities	8,640,000	10,000,000	−10,000,000	0
Public-service fellowships	1,920,000	1,920,000	−1,920,000	0
Institutional assistance:				
International education	24,000,000	26,000,000	0	0
Cooperative education	14,400,000	14,400,000	−14,400,000	0
Veterans Cost of Instruction	4,800,000	3,000,000	−3,000,000	0
Construction-loan subsidies	25,500,000	25,000,000	0	24,500,000
College-housing loans	232,000	40,000	0	40,000
Aid to land-grant colleges	2,800,000	2,800,000	0	0
Law School Clinical Experience	960,000	605,000	−605,000	0
Aid to disadvantaged:				
Developing institutions	142,483,000	129,600,000	+4,816,000	134,416,000
Minority Institutions Science Improvement	4,800,000	4,800,000	0	4,800,000
Programs for disadvantaged students	150,240,000	154,740,000	−29,556,000	35,000,000
Office for Civil Rights	45,038,000	44,868,000	0	42,058,000

	Fiscal 1982 Actual	Fiscal 1983 Estimated	Fiscal 1983 Supplemental (+) & rescissions (−)	Fiscal 1984 Requested
Aid to disadvantaged—continued:				
Migrant-student college aid	$ 1,160,000	$ 1,200,000	−$ 1,200,000	$ 0
Legal Training for the Disadvantaged	960,000	1,000,000	−1,000,000	0
Library resources:				
College libraries	1,920,000	1,920,000	0	0
Research libraries	5,760,000	6,000,000	0	0
Training and demonstration	880,000	880,000	0	0
Science and math education	0	0	0	50,000,000
Vocational education	655,786,000	728,661,000	0	†
Adult education	86,400,000	95,000,000	0	†
Women's education equity	5,760,000	5,760,000	−5,738,000	0
Bilingual training grants	28,836,000	31,288,000	−5,788,000	22,400,000
Education research and statistics:				
National Institute of Education	53,390,000	55,614,000	−6,225,000	48,231,000
Fund for the Improvement of Postsecondary Education	11,520,000	11,710,000	−5,710,000	6,000,000
National Center for Education Statistics	8,589,000	8,589,000	0	8,747,000
Education for the handicapped:				
Innovation and development	10,800,000	12,000,000	0	10,800,000
Personnel development	49,300,000	49,300,000	0	33,600,000
Vocational and postsecondary programs	2,832,000	2,832,000	0	2,832,000
Rehabilitation training	19,200,000	19,200,000	0	19,200,000
National Institute of Handicapped Research	28,560,000	30,060,000	0	30,060,000

† The Administration proposes merging support for adult and vocational education under a state block grant, and requests $500-million for the consolidated program.

In Other Federal Agencies

	Fiscal 1982 Actual	Fiscal 1983 Estimated	Fiscal 1984 Requested
Scientific research			
National Institutes of Health:			
Cancer Institute	$ 986,617,000	$ 983,576,000	$ 989,263,000
Heart, Lung, & Blood Institute	559,637,000	622,745,000	628,028,000
Institute of Dental Research	71,983,000	78,860,000	80,583,000
Institute of Arthritis, Diabetes, & Digestive Diseases	368,191,000	412,182,000	419,598,000
Institute of Neurological Disorders & Stroke	265,901,000	295,719,000	301,022,000
Institute of Allergy & Infectious Diseases	235,895,000	273,581,000	281,405,000
Institute of General Medical Sciences	339,862,000	369,561,000	374,832,000
Institute of Child Health & Human Development	226,309,000	253,655,000	257,348,000
Institute on Aging	81,903,000	93,996,000	95,670,000
Eye Institute	127,374,000	141,561,000	143,276,000
Institute of Environmental Health	106,270,000	164,367,000	166,721,000
Research Resources	184,177,000	213,804,000	228,542,000
International Center	9,205,000	10,147,000	11,588,000
Library of Medicine	45,035,000	46,043,000	49,616,000
Total N.I.H.	3,641,875,000	4,001,980,000	4,077,000,000
National Science Foundation:			
Research:			
Mathematical & physical sciences	272,843,000	299,716,000	364,300,000
Astronomical, earth & ocean sciences	259,853,000	276,109,000	334,900,000
Antarctic program	68,505,000	83,200,000	102,100,000
Biological & social sciences	176,597,000	190,243,000	223,600,000
Engineering	93,286,000	100,800,000	123,000,000
Technological & international affairs	40,324,000	44,166,000	36,800,000
Program management	63,182,000	65,312,000	66,000,000
Total research	971,595,000	1,061,700,000	1,250,700,000
Science and engineering education	20,900,000	30,000,000	39,000,000
Total N.S.F.	995,575,000	1,093,900,000	1,292,300,000
Agriculture Department:			
Cooperative research:			
Hatch Act support	139,592,000	149,295,000	149,295,000
Forestry research	12,031,000	12,452,000	12,452,000
Payments to black colleges	20,825,000	22,394,000	22,394,000
Special research grants	23,141,000	27,775,000	15,482,000
Competitive research grants	16,320,000	17,000,000	21,500,000
Animal health research grants	5,760,000	5,760,000	0
Total cooperative research	221,216,000	244,949,000	231,715,000
Extension service	315,702,000	328,654,000	287,082,000
Department of Commerce			
Sea grant program	35,000,000	35,000,000	0
Defense Department, basic research	663,500,000	779,000,000	850,000,000
Department of Energy			
General science	529,360,000	535,358,000	645,250,000
University research	253,000,000	266,000,000	292,000,000
Environmental Protection Agency			
Research and development	154,316,000	119,000,000	111,669,000
Department of Interior, basic research	74,000,000	88,000,000	89,000,000
National Aeronautics and Space Administration, university research	185,600,000	193,200,000	197,000,000

	Fiscal 1982 Actual	Fiscal 1983 Estimated	Fiscal 1984 Requested
Health professions			
Health professions education:			
Financial distress grants for minority institutions	$ 7,870,000	$ 8,086,000	$ 5,600,000
Nursing programs	50,586,000	48,523,000	13,228,000
Aid to disadvantaged students	16,743,000	17,240,000	18,188,000
Student loans	21,000,000	8,235,000	0
Public health	9,000,000	9,000,000	5,000,000
Primary care/family medicine training	50,782,000	54,252,000	43,214,000
Area health education centers	18,000,000	18,000,000	15,000,000
Total health professions education	175,000,000	172,000,000	116,506,000
National Health Service Corps	88,360,000	96,578,000	96,046,000
National Health Service Corps scholarships	42,813,000	11,042,000	0
Health research and training			
Mental-health research	143,787,000	158,300,000	172,133,000
Mental-health training	57,491,000	35,453,000	15,527,000
Drug-abuse research	41,026,000	46,999,000	56,160,000
Drug-abuse training	3,593,000	891,000	973,000
Alcoholism research	23,337,000	33,281,000	45,790,000
Alcoholism training	2,086,000	1,086,000	1,202,000
Centers for Disease Control:			
Occupational safety & health research	53,008,000	49,545,000	52,288,000
Occupational safety & health training	5,913,000	5,760,000	0
Health services research	16,092,000	16,416,000	17,949,000
Arts and humanities			
Institute of Museum Services	12,240,000	10,800,000	11,520,000
National Endowment for the Arts	143,456,000	144,108,000	125,000,000
National Endowment for the Humanities:			
Education programs	12,825,000	14,301,000	13,000,000
Fellowship programs	15,050,000	13,405,000	13,000,000
Research programs	20,135,000	16,555,000	14,800,000
General programs	16,057,000	25,112,000	15,350,000
State programs	20,329,000	20,329,000	15,990,000
Challenge grants	20,736,000	16,864,000	16,500,000
Treasury matching grants	8,064,000	11,064,000	10,570,000
Total N.E.H.	130,560,000	135,447,000	112,200,000
National Historical Publications and Records Commission	1,426,000	5,223,000	558,000
Civil Rights			
Commission on Civil Rights	12,318,000	11,981,000	12,180,000
Equal Employment Opportunity Commission	144,739,000	147,432,000	155,300,000
Office of Federal Contract Compliance Programs	42,555,000	43,815,000	47,393,000
Miscellaneous			
Peace Corps	105,000,000	109,000,000	108,500,000
VISTA	17,654,000	13,661,000	1,953,000
Corporation for Public Broadcasting *	172,000,000	137,000,000	130,000,000
U.S. Information Agency educational and cultural exchanges	99,943,000	126,756,000	129,300,000
Veterans' education and training	1,850,190,000	1,526,860,000	1,219,374,000

* Budget also requests rescinding $45-million from the fiscal 1983 appropriation, which would be spent in fiscal 1985.

CHRONICLE SURVEY

Faculty Salaries in 1982-83

Averages According to Age

	Public			Private			All		
	Average salary	1-year gain	Proportion of 56-to-65 average	Average salary	1-year gain	Proportion of 56-to-65 average	Average salary	1-year gain	Proportion of 56-to-65 average
Ph.D-granting universities									
35 or under	$22,128	12.8%	62%	$23,012	12.1%	55%	$22,437	12.5%	59%
36 to 45	27,916	7.9%	78%	28,038	10.9%	68%	27,959	8.9%	74%
46 to 55	31,576	6.0%	88%	33,145	9.1%	80%	32,125	7.1%	85%
56 to 65	35,870	6.1%	100%	41,515	8.4%	100%	37,846	6.9%	100%
Institutions granting other graduate degrees									
35 or under	19,647	8.7%	64%	19,908	10.8%	72%	19,687	9.1%	65%
36 to 45	24,650	6.6%	80%	23,515	9.2%	85%	24,477	6.9%	81%
46 to 55	27,651	5.6%	90%	24,584	8.3%	89%	27,185	5.9%	90%
56 to 65	30,640	10.9%	100%	27,655	7.8%	100%	30,186	10.5%	100%
Institutions granting only the bachelor's degree									
35 or under	—	—	—	17,674	9.2%	69%	17,674	9.2%	69%
36 to 45	—	—	—	21,409	8.9%	84%	21,409	8.9%	84%
46 to 55	—	—	—	24,076	7.8%	95%	24,076	7.8%	95%
56 to 65	—	—	—	25,452	9.4%	100%	25,452	9.4%	100%
2-year colleges									
35 or under	19,986	7.1%	72%	—	—	—	19,986	7.1%	72%
36 to 45	24,015	5.9%	88%	—	—	—	24,015	5.9%	88%
46 to 55	26,498	5.3%	97%	—	—	—	26,498	5.3%	97%
56 to 65	27,321	5.6%	100%	—	—	—	27,321	5.6%	100%
All institutions									
35 or under	20,442	9.6%	65%	20,699	11.0%	62%	20,509	10.0%	64%
36 to 45	25,497	6.8%	81%	25,032	10.1%	74%	25,376	7.7%	79%
46 to 55	28,556	5.7%	91%	28,558	8.6%	85%	28,557	6.4%	89%
56 to 65	31,327	7.8%	100%	33,651	8.6%	100%	31,934	8.0%	100%

Comparisons by Tenure Status

	4-year public		2-year public		All public		4-year private		All 4-year		All public and private	
	Average salary	1-year gain	Average salary	1-year gain	Average salary	1-year gain	Average salary	1-year gain	Average salary	1-year gain	Average salary	1-year gain
Ph.D.-granting universities												
Tenured	$31,610	7.3%	—	—	$31,610	7.3%	$33,004	9.5%	$32,098	8.1%	$32,098	8.1%
Nontenured (tenure track)	22,294	7.1%	—	—	22,294	7.1%	22,529	12.8%	22,376	9.0%	22,376	9.0%
Not on tenure track	—	—	—	—	—	—	—	—	—	—	—	—
Institutions granting other graduate degrees												
Tenured	27,097	7.7%	—	—	27,097	7.7%	25,562	8.6%	26,864	7.8%	26,864	7.8%
Nontenured (tenure track)	19,902	8.0%	—	—	19,902	8.0%	19,660	9.4%	19,865	8.0%	19,865	8.0%
Not on tenure track	19,810	8.0%	—	—	19,180	8.0%	20,838	7.7%	19,432	7.8%	19,432	7.8%
Institutions granting only the bachelor's degree												
Tenured	—	—	—	—	—	—	26,302	9.1%	$26,302	9.1%	26,302	9.1%
Nontenured (tenure track)	—	—	—	—	—	—	18,903	8.1%	18,903	8.1%	18,903	8.1%
Not on tenure track	—	—	—	—	—	—	—	—	—	—	—	—
Total												
Tenured	29,110	7.5%	$24,035	5.7%	27,632	6.7%	29,391	9.2%	29,165	7.8%	28,091	7.6%
Nontenured (tenure track)	20,969	7.6%	18,545	9.7%	20,263	8.1%	20,806	10.8%	20,937	8.2%	20,405	8.8%
Not on tenure track	—	—	19,177	8.0%	—	—	—	—	—	—	—	—

— Not applicable or data insufficient for reliable estimate.

Note: Survey data are based on responses of 4,235 faculty members who offered courses from the fall of 1980 through the fall of 1982. To include faculty members newly hired, the sample was drawn from faculty lists that were revised in September, 1982. Averages are for salary only. Extra earnings, fringe benefits, and the value of contributed services are not included. All salaries are adjusted to a nine-month basis. Data are weighted to represent faculty members at colleges and universities of all types except law and medical schools, proprietary institutions, private two-year colleges, and colleges with fewer than 500 students. Data also are weighted according to the distribution of faculty members in each of eight discipline groups: arts, business and economics, engineering, humanities, physical education, science and mathematics, social sciences, and vocational education.

Technical inquirise about the survey design and sampling techniques should be addressed to John Minter Associates, P.O. Box 107, Boulder, Colo. 80306.

SOURCE: SURVEY FOR THE CHRONICLE BY JOHN MINTER ASSOCIATES

Appeals Court Cites 'Fair Use' Guidelines in Copyright Ruling

LOS ANGELES

Pointing to controversial standards that limit classroom use of copyrighted materials, a federal appeals court has ruled that a teacher cannot copy substantial portions of protected works without permission of the copyright owner.

The decision, by the U.S. Court of Appeals for the Ninth Circuit, marks the first time a federal court has relied principally on a set of voluntary guidelines governing the "fair use" of copyrighted materials for educational purposes. The standards, adopted in 1976 by a group of publishers and educators, allow "multiple" copies to be made if they meet certain requirements for "brevity," "spontaneity," and "cumulative effect."

Some educators—especially officials in higher education—have argued that the guidelines are too restrictive.

Because the guidelines are not part of federal law, which covers fair use only in general terms, courts are not required to consider them.

In the Ninth Circuit case, Shirley Rowley, a high-school teacher of home economics in the San Diego Unified School District, claimed she did not have to seek permission—or pay royalty fees—to photocopy portions of a book on cake decorating that she wanted to use in her class.

A U.S. district court had agreed with her in 1980 that photocopying for non-commercial educational purposes is an acceptable fair use. But the Ninth Circuit ruled, 3 to 0, that educational photocopying is not "automatically" allowable. Noting that Ms. Rowley had copied nearly half of a protected work, the court held that such "wholesale" copying, regardless of its educational purposes, exceeded fair use.

Two years ago, in a case now pending before the Supreme Court, the Ninth Circuit ruled that home videotaping constitutes copyright infringement.

Ms. Rowley reportedly does not plan to appeal the ruling in her case to the Supreme Court. Settlement terms will be decided by the U.S. District Court for the Southern District of California.

According to the guidelines adopted in 1976, educators should not copy more than 10 per cent of a work without permission or use the copies repeatedly from term to term.

Debate over the guidelines has become more heated in recent weeks since nine publishers sued New York University and several of its professors for copyright infringement.

The appeals court's decision "strengthens the concept that educators can't just blanketly say that their copying is fair use," said Allan Wittman, chairman of the Association of American Publishers' copyright committee.

Because fair-use questions are complex, he said, the case also highlights the need for colleges and universities to adopt policies that encourage professors to follow copyright regulations. "Professors don't know what the boundaries are," said Mr. Wittman, who is also president of the Professional Books Division of Macmillan Publishing Company.

—STACY E. PALMER

The Agile Administrator
By Dr. George Allen

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News Summary

Articles on inside pages

The denial of tenure to a feminist historian at Stanford University has raised questions about affirmative action. Story on Page 5.

Control Data will give away more than 400 microcomputers to colleges and universities in an effort to increase the supply of engineers. Story on Page 2.

Public colleges expect to spend an average of 9 per cent more in 1982-83 than they did last year, according to the latest Chronicle Survey. Story and table on Page 11.

The White House may be considering replacing the present Archivist of the United States with a former ambassador and arms negotiator. Story on Page 13.

Some colleges have begun charging students fees when they apply for federal loans. Story on Page 13.

Over 60 per cent of the black athletes in the Big Eight Conference would have been adversely affected by new academic standards adopted by the National Collegiate Athletic Association. Story on Page 17.

An injured athlete at Indiana State University is not entitled to workers' compensation, the state's supreme court has ruled. Story on Page 17.

American colleges and universities do not have adequate policies regarding the foreign students on their campuses. Story on Page 19.

Countless books published over the last century are rotting away because of lack of attention to how they are produced. Story on Page 25.

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Cooperation Said to Be Increasing Between High Schools, Colleges

By **BEVERLY T. WATKINS**

After more than a decade during which they have virtually ignored each other, the nation's higher-education institutions and secondary schools are beginning to cooperate to solve some of their mutual education problems, says a new report from the Carnegie Foundation for the Advancement of Teaching.

Ernest L. Boyer, president of the foundation, says in a foreword to the report that an informal survey undertaken for the foundation "reveals a dramatic upsurge in collaboration" between colleges and schools. Some of the institutions, he says, "have come together to accomplish clear, explicit goals and objectives that should be pursued by every institution in every state."

The report speculates that "the loss in public confidence in education at all levels" and the persistent need for remedial programs at colleges may be partly responsible for the increased interest that school and college educators are showing in each other's problems. Declining enrollments and pressure from state legislators who are concerned about the financing of education may also be factors, the report says.

The report cites a number of projects from New York to California in which high schools and colleges have collaborated successfully on advanced placement, teacher education, transitional curricula, experimental schools, and other matters.

However, the report says, some higher-education institutions are still making unilateral decisions about problems that they and the high schools have in common and taking actions with little or no consultation. Other colleges are sitting back like "indifferent spectators" while the schools struggle with problems they cannot solve alone.

"The worlds of the school and the college are different at the same time that they are alike," the report notes. "Teachers at the two levels speak the same tongue, yet some are incapable of dialogue. One is supposed to prepare students to sit in the

Continued on Page 8, Column 3

The Carnegie Foundation for the Advancement of Teaching is planning more reports and a new fellowship program for university presidents. Story on Page 8.

Private Colleges Report Increase in Applications

But public institutions say 8 pct. fewer have applied

By **JACK MAGARRELL**

Private colleges and universities, whose average first-year classes now are significantly smaller than last year's report preliminary but promising signs that larger numbers of freshmen may be coming next fall.

A far different pattern is reported by public institutions, whose overall enrollment rose slightly last fall. Early data on freshman applications received by those colleges and universities show a significant drop compared with last year at the same time.

Those crosscurrents in freshman applications show up in the first of the Chronicle Survey's samplings of admission trends for the fall of 1983. (See table, Page 10.)

The survey results show that the average number of freshman applications received by private institutions through December 31, 1982, was up 7 per cent over the number received by the same date a year earlier. At the same time, the average number of applications received by public colleges and universities had declined 8 per cent.

By December 31, the average four-year institution, public or private, receives roughly a third of the applications it will get for admission to the following fall's freshman class.

Liberal-Arts Colleges Gain

Despite the increase in freshman applications for all private institutions combined, 62 per cent of the private Ph.D.-granting and research universities reported a decline in applications, compared with the previous year. The university losses were more than offset by gains—averaging 10 per cent—at private liberal-arts colleges.

Overall, about 48 per cent of the private institutions and 51 per cent of the public institutions reported decreases.

In the Northeast and Mid-Atlantic regions, 62 per cent of the private institutions reported an increase in freshman applica-

Continued on Page 10, Column 1

House Panel Votes $400-Million to Ease Science-Teacher Shortage

Grants to improve foreign-language instruction added

By **JANET HOOK**

WASHINGTON

The House Committee on Education and Labor last week approved a $400-million plan to reduce the shortage of science and mathematics teachers in elementary and secondary schools.

In approving the measure, the panel also voted to provide grants to colleges for improving foreign-language instruction, despite opposition from some legislators who feared the addition would dilute the effectiveness of the new programs.

The Congressmen said the measure might be taken to the House floor as early as next week, after it is reviewed and revised by the Committee on Science and Technology.

The measure, HR 1310, consolidated two bills introduced earlier this year by Rep. Carl D. Perkins, Democrat of Kentucky and chairman of the education panel, and Rep. Don Fuqua, Democrat of Florida and chairman of the science committee. The bills were combined in an effort to resolve a jurisdictional dispute between the two panels that threatened to stall action on both science-education bills.

As approved by the House education committee, HR 1310 would authorize $300-million for new grants to improve science and mathematics instruction at elementary and secondary schools. Under the program, which would be run by the Department of Education, up to $250-million would go to state education agencies and local school districts, and the remaining $50-million would be earmarked for grants to colleges and universities.

The higher-education programs would include $20-million for scholarships and $17.5-million for summer institutes to improve teachers' skills in science, mathematics, and foreign languages.

The bill also would provide $100-million a year for five years for the National Science Foundation to finance fellowships, lab equipment, and research grants, under

Continued on Page 15, Column 1

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Looking for Work Outside Academe

In a depressed academic job market, many scholars in the arts and sciences wonder:

- ▶ Should they consider a new career in business or government?
- ▶ Would they qualify?
- ▶ What's the first step?

Some ideas and sources of information appear in the Personal & Professional Section, Page 21.

Test-Score Use in Admissions Assailed in Mass.

By E. PATRICK McQUAID

BOSTON

A proposal to set minimum admissions standards for Massachusetts's public colleges and universities has sparked angry debate among representatives of government, education, and minority groups.

The plan, proposed by the Massachusetts Board of Regents of Higher Education, would set a combined verbal and mathematics score of 800 (out of a possible 1,600) on the Scholastic Aptitude Test as the minimum for admission to all campuses of the University of Massachusetts.

Candidates would also have to be in the top half of their high-school class.

A combined S.A.T. score of 750 and ranking in the top 40 per cent of the high-school class would be required for admission to the state's nine four-year colleges. An open-admissions policy would remain in effect at community colleges.

Controversy continues over using standardized tests to determine athletes' eligibility. Story on Page 17.

In addition, students applying to four-year institutions would have to complete 16 units of "required high-school subject preparation," including four years of English, three of mathematics, and two each in the natural sciences, social sciences, and a foreign language.

At a public hearing this month, the proposal's reliance on S.A.T. scores came under sharp criticism from legislators representing minority and low-income communities. They said the scores would exclude the entire student bodies of some school districts from admission to four-year colleges.

"Applying S.A.T. scores as an arbitrary minimum standard would completely exclude children in my district," said state Rep. Saundra Graham, who is chairman of the six-member Massachusetts Black Legislative Caucus. She described the standardized test scores in her district as "horrendous."

Critics also charged that the 15-member, all-white, all-male board of regents was largely unaware of needs of students from minority groups.

David C. Knapp, president of the University of Massachusetts system, was the only chief executive in the state's 27 institutions who spoke against the plan.

He suggested that the regents set an average S.A.T. score for an entering class rather than a minimum for each student.

He also said a waiver proposed by the regents for culturally disadvantaged candidates would stigmatize those applicants and defeat the very reason for setting standards.

An alternative plan, calling for "guidelines rather than minimums," has been submitted to the regents by the Black Legislative Caucus and the Council of Minority Educators in Massachusetts Public Colleges and Universities. Applicants would be rated on seven criteria: high-school record, college-entrance examination scores, letters of recommendation, personal interviews, personal statements, special talents such as artistic or athletic abilities, and special interests.

Fewer Score High on Scholastic Aptitude Test; Selective Colleges Concerned

STANFORD, CAL.

The number of students scoring at the highest levels on the verbal and mathematics sections of the Scholastic Aptitude Test has declined dramatically over the past decade, according to an analysis by Fred Hargadon, dean of admissions at Stanford University here.

Mr. Hargadon, who presented his findings at a meeting of Stanford's Academic Council this month, said the shrinking pool of students scoring at the higher levels on the S.A.T.'s 200-to-800 scale could pose a problem for colleges and universities that traditionally have sought such people.

Such institutions may find it harder to recruit the "truly exceptional students," he said.

For the 10 years from 1972 through 1982, he said, the number of students scoring 650 or higher on the verbal test fell by 45 per cent from 53,794 to 29,236. In that period, the number of students taking the test fell by 3 per cent. On the mathematics test, Mr. Hargadon found, the number of students scoring 650 or higher fell by 23 per cent, from 93,868 to 71,916.

In a telephone interview last week, Mr. Hargadon, former chairman of the board of trustees of the College Board, said that it was "futile to speculate" on the specific causes of the decline.

"I don't think students are any less capable than other generations," Mr. Hargadon said. "Students can do well in the right school systems."

But he added, "There is something going wrong in many of the schools. It is a matter of lowered standards and lowered expectations in general."

Some additional evidence that the number of students performing at the highest levels has been declining was provided in a report issued last week by the National Assessment of Educational Progress.

The report indicated that, in mathematics and science at least, "the performance of American youth declined during the 1970's." The performance of students in the lowest quarter on the national assessments improved, the report said, while the performance of students in the top quarter declined significantly.

Mr. Hargadon reported the following numbers of students who scored 650 or higher on the verbal and mathematics sections of the S.A.T. over the 10-year period:

	1972	1982
Above 650 verbal	53,794	29,236
Above 700 verbal	17,560	8,240
Above 750 verbal	2,817	1,479
Above 650 math	93,868	71,916
Above 700 math	37,067	29,528
Above 750 math	9,966	8,351

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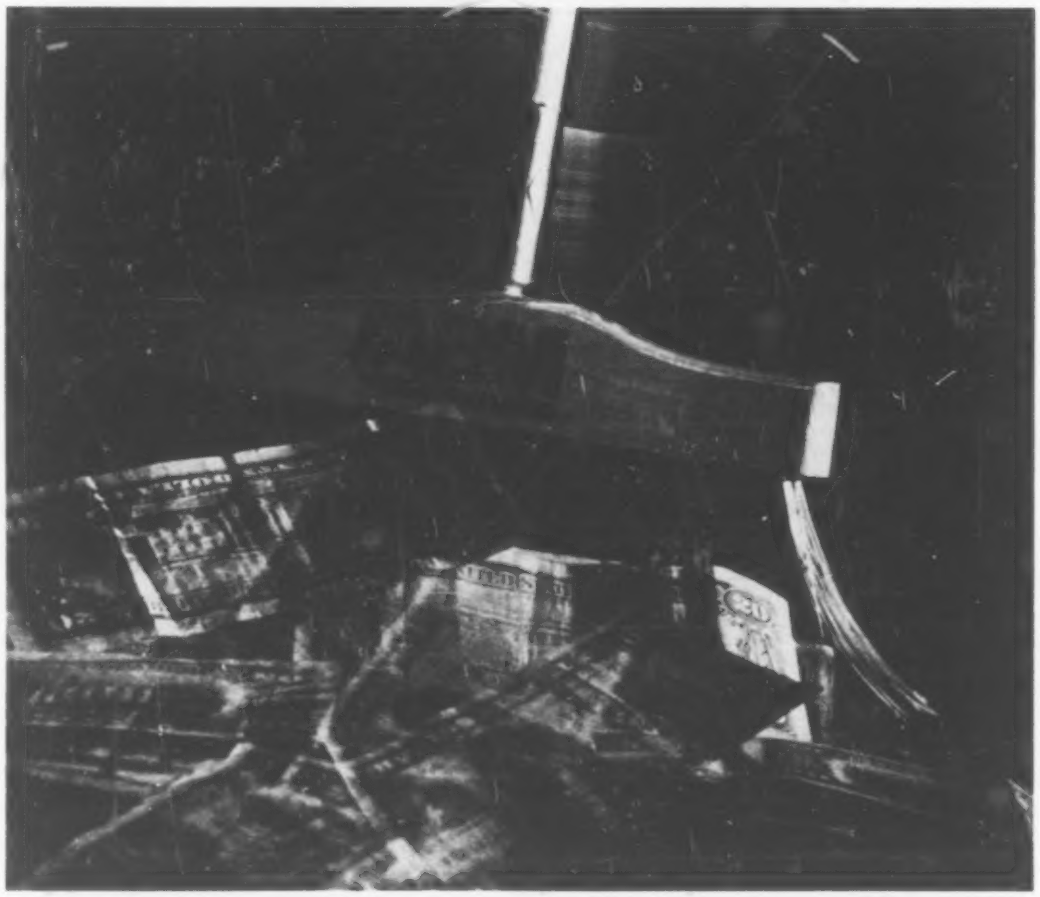

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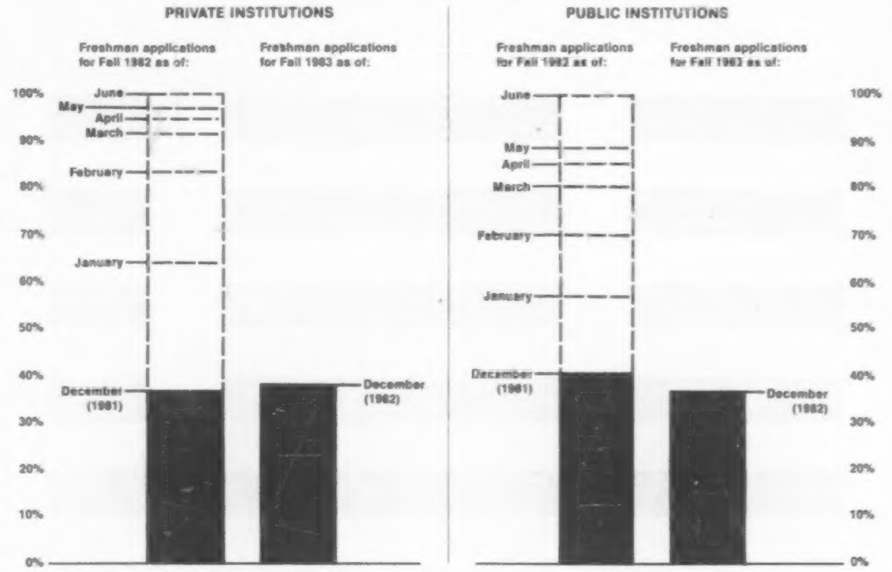
CHRONICLE SURVEY

Changes in Number of Freshman Applicants

December 31, 1982, compared with December 31, 1981



Note: All percentages are of June, 1982, total

CHRONICLE CHART BY PETER H. STAFFORD

	Change in average (a)	Per cent reporting increase	Per cent reporting decrease	Per cent change		
				Low (b)	Median (c)	High (d)
Private colleges and universities						
Research and Ph.D.-granting	+ 2.9%	37.5%	62.5%	−11.6%	− 7.3%	+13.6%
Comprehensive (e)	− 5.6%	44.7%	55.3%	−11.4%	− 4.4%	+ 6.6%
Liberal arts	+10.1%	54.2%	44.6%	−15.7%	+ 2.6%	32.7%
Regions						
Northeast and Mid-Atlantic	+ 3.4%	62.5%	35.4%	− 5.8%	+ 3.9%	+31.8%
Great Lakes and Plains	− 2.5%	41.8%	58.2%	−16.0%	− 5.3%	+17.4%
Southeast	+ 1.2%	51.9%	48.1%	−28.3%	− 0.4%	+27.7%
West and Southwest	+ 3.1%	35.3%	64.7%	−11.2%	− 6.1%	+ 5.9%
Enrollment						
500 − 999	+23.6%	60.6%	39.4%	−20.7%	+ 8.3%	+43.8%
1,000 − 2,499	+ 3.9%	47.6%	50.8%	−14.0%	− 0.8%	+21.1%
2,500 − 4,999	− 1.5%	36.4%	63.6%	−10.1%	− 4.8%	+ 2.9%
5,000 − 9,999	− 8.1%	37.5%	62.5%	−14.4%	− 7.3%	+10.6%
10,000 and over	+ 9.8%	66.7%	33.3%	−11.9%	+ 6.3%	+26.6%
All private institutions	**+ 7.1%**	**51.5%**	**47.6%**	**−13.1%**	**− 0.2%**	**+22.4%**
Public colleges and universities						
Research and Ph.D.-granting	− 6.6%	44.4%	55.6%	−19.2%	− 2.5%	+11.5%
Comprehensive (e)	− 8.4%	50.0%	50.0%	−26.2%	− 6.0%	+37.9%
Regions						
Northeast and Mid-Atlantic	+ 1.2%	42.9%	57.1%	−17.9%	− 5.6%	+17.7%
Great Lakes and Plains	−10.1%	48.5%	51.5%	−15.5%	− 3.1%	+13.0%
Southeast	+ 0.1%	55.0%	45.0%	−28.9%	+ 0.8%	+ 20.5%
West and Southwest	−17.6%	37.5%	62.5%	−32.3%	−13.5%	+ 15.3%
Enrollment						
500 − 2,499	+20.5%	50.0%	50.0%	−22.8%	−11.3%	+40.5%
2,500 − 4,999	−16.5%	66.7%	33.3%	−29.6%	+ 0.8%	+38.9%
5,000 − 9,999	− 9.4%	50.0%	50.0%	−28.1%	−13.5%	+12.9%
10,000 −19,999	− 0.2%	45.8%	54.2%	− 9.8%	− 5.6%	+15.8%
20,000 and over	− 9.1%	41.9%	58.1%	−21.7%	− 2.9%	+11.7%
All public institutions	**− 8.0%**	**48.6%**	**51.4%**	**−20.4%**	**− 2.5%**	**+17.1%**
All institutions	**+ 1.8%**	**50.5%**	**48.9%**	**−14.0%**	**− 1.1%**	**+20.5%**

(a) Percentage change in mean number of applications received by December 31, 1982, compared with the mean for a year earlier.
(b) One-fourth of the institutions reported changes smaller than the percentage shown.
(c) Half of the institutions reported changes greater than the percentage shown.
(d) One-fourth of the institutions reported changes greater than the percentage shown.
(e) Institutions with more than 1,500 students, a liberal-arts program, and at least one professional program.
Note: Survey data are from a stratified random sample of 230 four-year colleges and universities, excluding those with enrollment under 500.

SOURCE: SURVEY FOR THE CHRONICLE BY JOHN MINTER ASSOCIATES

Private-College Applications *Continued from Page 1*

tions, compared with 35 per cent in the West and Southwest.

For public colleges and universities, increases were most common in the Southeast, where applications were up at 55 per cent of the institutions. In the West and Southwest only 37 per cent of the public institutions reported increases:.

A year ago, the Chronicle Survey found that at the end of December, 1981, freshman applications were up 3.1 per cent over the previous year at public institutions and up 0.7 per cent at private institutions. By the end of June, the number of applications for admission as freshmen in the fall of 1982 had dropped below the level of the same date a year earlier at both public and private institutions.

When it came to actual enrollment of first-year students last fall, private colleges and universities reported a decline of 3.8 per cent from the previous fall's number, according to a large-scale survey by the National Institute of Independent Colleges and Universities.

A third of the private institutions reported losses of more than 10 per cent in their freshman classes last fall. The freshman enrollment declines last fall were particularly large in the Middle Atlantic States and among the less selective liberal-arts colleges.

The federal government's National Center for Education Statistics, which did not report changes in enrollment of first-year students, found that total enrollment at public four-year institutions last fall was down about 0.7 per cent, compared with fall 1981.

The Chronicle Survey of freshman applications was designed and conducted for *The Chronicle* by John Minter Associates, of Boulder, Colo. The survey sample did not include two-year institutions or colleges with fewer than 500 students.

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CHRONICLE SURVEY

Spending by Colleges and Universities, by Type of Institution

Public colleges and universities expect to increase their spending this year by an average of 9 per cent over last year's level, but they expect decreases for sponsored research and public service, according to a Chronicle Survey of higher-education finances.

For private institutions, the average spending in 1982-83 is expected to be only 6 per cent above last year's figure, despite projected increases of 17 per cent in payments of principal and interest on institutional debts, 12 per cent in spending for scholarships, and 10 per cent in spending for plant operations.

The survey figures show an average increase of 8.9 per cent in the public institutions' spending in 1981-82 compared with the previous year. The comparable increase for private colleges and universities was 11.6 per cent.

The figures on average spending by colleges and universities are based on unaudited data reported by the institutions for 1981-82, plus the institutions' projections for 1982-83. Total spending and shares of total spending reported are based on totals not limited to educational and general expenditures.

The survey was conducted for *The Chronicle* by John Minter Associates of Boulder, Colo., a research organization that specializes in higher-education studies. Data for the survey are based on responses from a sample of 150 public institutions and 150 private institutions.

Public institutions

	Share of total expenditure, 1981-82			Change from 1980-81 to 1981-82			Projected change, 1981-82 to 1982-83
	Average	High (a)	Low (b)	Average	High (c)	Low (d)	
Ph.D.-granting universities							
Instruction	43.4%	53.1%	33.6%	+11.7%	+ 16.3%	+ 7.0%	+ 7%
Sponsored research	15.5%	19.5%	11.5%	+ 5.7%	+ 8.8%	+ 2.6%	−31%
Public service	10.3%	15.3%	+ 5.2%	− 2.3%	+ 4.1%	− 6.7%	+ 8%
Academic support	6.3%	8.4%	4.2%	+11.6%	+22.4%	+ 0.8%	0%
Student services	2.3%	3.1%	1.5%	− 7.9%	+12.8%	−28.6%	+ 8%
Institutional support	5.4%	7.1%	3.7%	+12.6%	+26.2%	− 1.1%	+11%
Plant operations	6.9%	7.8%	5.9%	+13.5%	+22.2%	+ 4.8%	+ 4%
Scholarships	3.4%	5.4%	1.4%	+10.9%	+21.2%	+ 0.7%	+ 7%
Principal and interest	1.0%	1.8%	0.2%	− 1.0%	+ 5.1%	− 7.1%	+ 6%
Auxiliary enterprises							
Room and board	6.1%	8.3%	3.4%	+11.9%	+19.2%	+ 4.6%	+ 7%
Total	12.6%	18.7%	6.4%	+11.3%	+20.1%	+ 2.6%	+ 8%
Intercollegiate athletics	2.6%	3.2%	2.1%	+14.7%	+19.9%	+ 9.4%	+ 7%
Total	—	—	—	+ 8.8%	+12.5%	+ 5.1%	+ 6%
Comprehensive institutions (e)							
Instruction	32.0%	35.5%	28.6%	+ 8.5%	+12.3%	+ 4.6%	+ 8%
Sponsored research	4.7%	12.0%	0.0%	+ 6.8%	+36.2%	−22.7%	−16%
Public service	3.0%	8.0%	0.0%	+13.3%	+36.1%	− 9.4%	+ 6%
Academic support	8.7%	11.1%	6.2%	+ 9.2%	+15.5%	+ 2.9%	+ 6%
Student services	5.3%	7.1%	3.5%	+ 6.8%	+18.4%	− 4.9%	+ 2%
Institutional support	8.8%	11.8%	5.9%	+ 7.6%	+19.5%	− 4.4%	+10%
Plant operations	10.6%	13.5%	7.8%	+12.7%	+18.9%	+ 6.4%	+ 7%
Scholarships	3.1%	4.5%	1.6%	+16.6%	+46.5%	−13.0%	+ 4%
Principal and interest	1.9%	3.1%	0.7%	+32.6%	+95.9%	−30.1%	—
Auxiliary enterprises							
Room and board	8.5%	13.3%	3.7%	+ 9.3%	+15.3%	+ 3.2%	+ 9%
Total	13.5%	20.9%	6.0%	+ 8.0%	+19.2%	− 3.0%	+ 5%
Intercollegiate athletics	2.1%	3.0%	1.2%	+17.4%	+31.8%	+ 3.1%	+ 1%
Total	—	—	—	+ 6.1%	+11.6%	+ 0.6%	+14%
2-year colleges							
Instruction	43.0%	49.4%	36.7%	+ 9.7%	+13.8%	+ 5.6%	+ 8%
Public service	2.2%	3.9%	0.5%	− 4.8%	+23.1%	−32.7%	−12%
Academic support	7.2%	9.6%	4.9%	+ 9.6%	+18.1%	+ 1.1%	+ 9%
Student services	6.9%	8.9%	4.8%	+ 9.1%	+15.9%	+ 2.2%	+ 5%
Institutional support	13.9%	18.1%	9.6%	+16.8%	+27.4%	+ 6.2%	+ 6%
Plant operations	10.8%	12.9%	8.9%	+12.4%	+22.5%	+ 2.3%	+ 9%
Scholarships	2.0%	3.5%	0.6%	+ 1.6%	+19.3%	−16.0%	+ 4%
Principal and interest	2.5%	3.8%	1.2%	− 4.7%	+17.8%	−27.2%	—
Auxiliary enterprises							
Room and board	8.8%	14.2%	3.3%	+17.1%	+26.4%	+ 7.8%	+ 4%
Total	11.6%	17.5%	5.6%	+15.7%	+25.2%	+ 6.3%	+ 3%
Intercollegiate athletics	2.2%	3.0%	1.3%	+11.0%	+17.0%	+ 5%	+ 9%
Total	—	—	—	+10.0%	+14.1%	+ 6%	+ 7%
All public institutions							
Instruction	40.2%	46.1%	34.3%	+ 9.6%	+13.6%	+ 5.5%	+ 8%
Sponsored research	2.5%	4.8%	1.0%	+ 2.2%	+10.0%	− 5.6%	− 7%
Public service	3.1%	5.9%	0.8%	+ 0.1%	+24.8%	−24.6%	− 6%
Academic support	7.5%	9.9%	5.2%	+ 9.7%	+17.8%	+ 1.5%	+ 7%
Student services	6.1%	7.9%	4.2%	+ 7.0%	+16.3%	− 2.3%	+ 4%
Institutional support	11.9%	15.5%	8.1%	+14.1%	+25.3%	+ 2.9%	+ 7%
Plant operations	10.4%	12.6%	8.4%	+ 12.6%	+21.5%	+ 3.6%	+ 8%
Scholarships	2.4%	3.9%	0.9%	+ 6.2%	+26.4%	−13.8%	+ 4%
Principal and interest	2.2%	3.5%	1.0%	+ 5.2%	+36.7%	−26.2%	+ 1%
Auxiliary enterprises							
Room and board	8.5%	13.5%	3.4%	+14.6%	+22.9%	+ 6.3%	+ 6%
Total	12.2%	18.5%	5.8%	+13.3%	+23.2%	+ 3.6%	+ 8%
Intercollegiate athletics	2.2%	3.0%	1.3%	+13.0%	+21.0%	+ 4.9%	+ 7%
Total	—	—	—	+ 8.9%	+13.3%	+ 4.5%	+ 9%

* Total includes all expenditures, not just educational and general expenditures.

— Not applicable or data insufficient for reliable estimate.

(a) At about one-fifth of the institutions, the share of total expenditure was higher than the "high" percentage (mean percentage plus one mean deviation).

(b) At about one-fifth of the institutions, the share of total expenditure was lower than the "low" percentage (mean percentage minus one mean deviation).

(c) About one-fifth of the changes were higher than the "high" percentage (mean increase plus one mean deviation).

(d) About one-fifth of the changes were lower than the "low" percentage (mean change minus one mean deviation).

(e) Institutions with more than 1,500 students, a liberal-arts program, and at least one professional program.

Private institutions

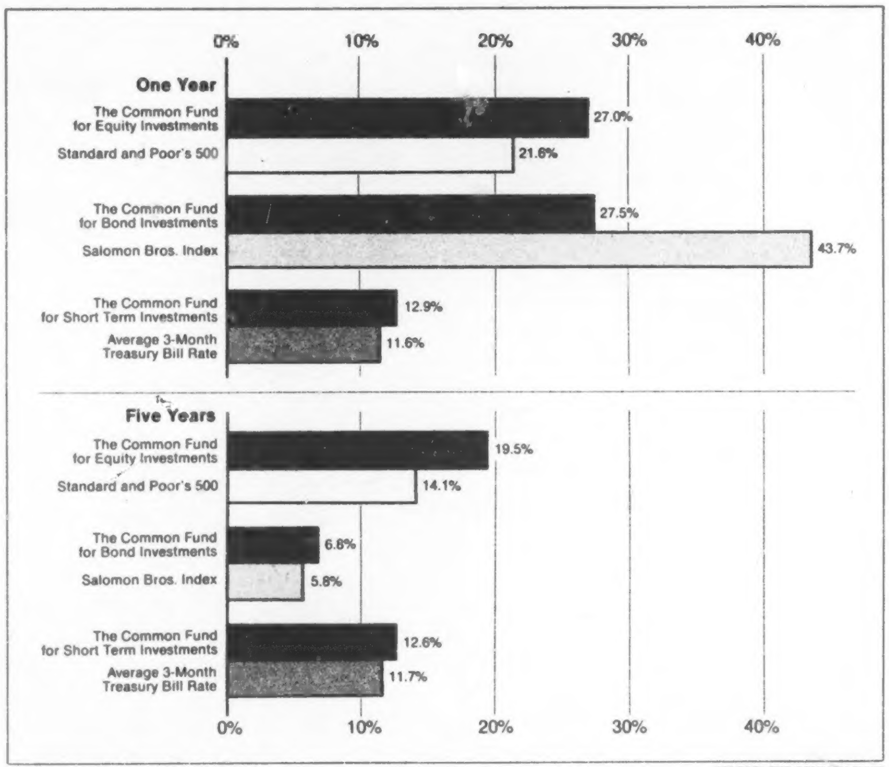
	Share of total expenditure, 1981-82			Change from 1980-81 to 1981-82			Projected change, 1981-82 to 1982-83
	Average	High (a)	Low (b)	Average	High (c)	Low (d)	
Ph.D.-granting universities							
Instruction	34.0%	39.8%	28.3%	+12.0%	+15.6%	+ 8.4%	+ 10%
Sponsored research	9.0%	13.2%	4.8%	− 3.0%	+ 2.5%	− 8.6%	+ 4%
Public service	0.5%	1.0%	0.1%	− 6.0%	+ 4.7%	−16.7%	+ 2%
Academic support	5.7%	8.7%	2.7%	+13.9%	+18.2%	+ 9.6%	+10%
Student services	3.2%	4.2%	2.2%	+14.6%	+17.4%	+11.8%	+ 8%
Institutional support	9.5%	12.1%	6.8%	+11.7%	+13.0%	+10.4%	+17%
Plant operations	6.2%	7.4%	5.1%	+12.7%	+15.8%	+ 9.6%	+26%
Scholarships	6.1%	7.5%	4.7%	+11.7%	+18.6%	+ 4.7%	+16%
Principal and interest	1.0%	2.0%	0.0%	+20.1%	+38.1%	+ 2.0%	+22%
Auxiliary enterprises							
Room and board	7.8%	11.4%	4.3%	+ 8.2%	+11.7%	+ 4.8%	+12%
Total	12.0%	21.7%	2.2%	+10.2%	+13.2%	+ 7.2%	+ 1%
Intercollegiate athletics	4.1%	5.8%	2.4%	+11.4%	+21.4%	+ 1.4%	+ 7%
Total	—	—	—	+10.2%	+11.2%	+ 9.3%	+10%
Other institutions granting graduate degrees							
Instruction	31.9%	36.4%	27.4%	+11.7%	+15.1%	+ 8.3%	+ 6%
Sponsored research	3.1%	6.8%	0.0%	+25.2%	+80.0%	−29.7%	− 6%
Academic support	6.1%	8.6%	3.6%	+10.0%	+20.4%	− 0.3%	+ 6%
Student services	6.7%	8.4%	4.9%	+12.1%	+17.8%	+ 6.4%	+ 3%
Institutional support	13.2%	16.0%	10.4%	+11.8%	+19.5%	+ 4.1%	+14%
Plant operations	9.5%	12.1%	6.9%	+10.8%	+18.0%	+ 3.6%	+ 8%
Scholarships	9.3%	11.3%	7.3%	+14.2%	+26.8%	+ 1.6%	+ 7%
Principal and interest	1.6%	2.5%	0.6%	+ 8.0%	+28.6%	−12.0%	+13%
Auxiliary enterprises							
Room and board	13.5%	17.3%	9.7%	+10.4%	+16.2%	+ 4.5%	+ 4%
Total	14.6%	22.5%	6.7%	+13.4%	+24.4%	+ 2.4%	+ 6%
Intercollegiate athletics	2.7%	4.0%	1.4%	+15.4%	+26.6%	+ 4.1%	+ 8%
Total	—	—	—	+11.3%	+14.5%	+ 8.0%	+ 6%
Selective liberal-arts colleges							
Instruction	27.5%	30.3%	24.6%	+14.2%	+17.7%	+10.7%	+ 7%
Sponsored research	1.6%	2.8%	0.5%	+10.1%	+50.3%	−30.1%	− 9%
Academic support	6.4%	8.2%	4.6%	+16.0%	+20.8%	+11.1%	+10%
Student services	7.6%	9.2%	5.6%	+15.0%	+21.3%	+ 8.6%	+ 6%
Institutional support	13.9%	16.3%	11.4%	+15.7%	+24.1%	+ 7.3%	+14%
Plant operations	10.9%	12.3%	9.5%	+15.6%	+22.9%	+ 8.3%	+ 9%
Scholarships	10.7%	13.1%	8.3%	+20.5%	+32.3%	+ 8.7%	+17%
Principal and interest	2.0%	3.6%	0.5%	+36.4%	+104.2%	−31.5%	+34%
Auxiliary enterprises							
Room and board	14.0%	17.0%	11.0%	+12.8%	+18.9%	+ 6.8%	+ 6%
Total	16.3%	22.4%	10.2%	+10.7%	+17.3%	+ 4.0%	+14%
Intercollegiate athletics	2.7%	4.5%	1.0%	+14.4%	+26.4%	+ 2.5%	+10%
Total	—	—	—	+14.1%	+17.6%	+10.6%	+ 9%
Less selective liberal-arts colleges							
Instruction	27.5%	31.8%	23.3%	+ 8.5%	+15.0%	+ 2.0%	+ 8%
Academic support	6.8%	9.9%	3.7%	+11.1%	+33.4%	−11.2%	+ 5%
Student services	9.4%	11.2%	7.7%	+13.6%	+25.0%	+ 2.1%	+ 6%
Institutional support	15.7%	19.5%	11.8%	+14.6%	+25.8%	+ 3.3%	+ 5%
Plant operations	10.1%	12.7%	7.6%	+10.7%	+27.6%	− 6.2%	+ 5%
Scholarships	8.4%	11.5%	5.3%	+16.4%	+28.9%	+ 3.9%	+13%
Principal and interest	2.4%	4.4%	0.4%	+15.2%	+52.0%	−21.6%	+18%
Auxiliary enterprises							
Room and board	15.6%	19.4%	11.7%	+12.8%	+19.7%	+ 5.9%	+ 9%
Total	19.3%	25.0%	13.6%	+ 5.0%	+13.9%	− 3.9%	+ 9%
Intercollegiate athletics	2.5%	3.4%	1.2%	+ 9.9%	+22.4%	− 2.7%	− 3%
Total	—	—	—	+11.1%	+16.1%	+ 6.0%	+ 6%
2-year colleges							
Instruction	22.1%	24.5%	19.7%	+11.4%	+15.2%	+ 6.5%	+ 9%
Academic support	3.9%	5.2%	2.6%	+11.7%	+17.9%	+ 5.6%	+ 7%
Student services	12.5%	14.9%	10.0%	+25.3%	+41.0%	+ 9.6%	− 1%
Institutional support	17.1%	21.2%	12.5%	+17.3%	+26.9%	+ 7.6%	+ 6%
Plant operations	9.7%	12.1%	7.4%	+19.9%	+32.1%	+ 7.7%	+17%
Scholarships	8.1%	11.5%	4.6%	+ 5.1%	+16.2%	− 6.0%	+12%
Principal and interest	1.7%	2.7%	0.6%	− 0.3%	+17.4%	−18.0%	+ 9%
Auxiliary enterprises							
Room and board	18.4%	22.4%	14.4%	+11.7%	+18.1%	+ 5.4%	− 4%
Total	14.0%	21.7%	6.3%	− 5.2%	+13.5%	−23.8%	− 2%
Total	—	—	—	+12.0%	+15.1%	+ 9.0%	+ 4%
All private institutions							
Instruction	27.7%	31.5%	23.8%	+10.6%	+15.4%	+ 5.6%	+ 8%
Sponsored research	1.4%	2.5%	0.3%	+ 6.4%	+22.9%	−10.2%	− 2%
Public service	0.0%	0.1%	0.0%	− 0.4%	+ 0.3%	− 1.0%	0%
Academic support	5.9%	8.4%	3.5%	+11.7%	+25.0%	− 1.6%	+ 6%
Student services	8.9%	10.8%	7.0%	+16.0%	+26.0%	+ 5.9%	+ 4%
Institutional support	14.9%	18.3%	11.3%	+14.5%	+23.7%	+ 5.2%	+ 9%
Plant operations	9.7%	12.1%	7.5%	+13.3%	+25.3%	+ 1.4%	+10%
Scholarships	8.6%	11.4%	5.9%	+13.7%	+25.5%	+ 1.9%	+12%
Principal and interest	2.0%	3.4%	0.5%	+13.0%	+44.5%	−18.5%	+17%
Auxiliary enterprises							
Room and board	15.1%	18.8%	11.3%	+11.8%	+18.0%	+ 5.5%	+ 5%
Total	16.4%	23.3%	9.5%	+ 5.6%	+16.4%	− 5.3%	+ 6%
Intercollegiate athletics	2.1%	3.1%	1.0%	+ 9.6%	+18.9%	+ 0.2%	+ 2%
Total	—	—	—	+11.6%	+15.4%	+ 7.8%	+ 6%

Note: Survey is based on unaudited data reported by institutions in a stratified random sample of 150 private institutions and 150 public institutions. The approximate response rates were 90 per cent for 1981-82 data and 70 per cent for 1982-83 projections. Because the 1982-83 projections are based on a smaller number of responses, they should be regarded as less reliable than the data for 1981-82. Data for "all public institutions" and "all private institutions" are weighted according to the distribution of institutions by type. Technical inquiries about the survey design and sampling techniques should be addressed to John Minter Associates, P.O. Box 107, Boulder, Colo. 80306.

SOURCE: SURVEY FOR THE CHRONICLE BY JOHN MINTER ASSOCIATES

Common Fund Tops $1-Billion

Return on mutual fund's equity investments up sharply in 1982



CHRONICLE CHART BY PETER H. STAFFORD

SOURCE: THE COMMON FUND

FAIRFIELD, CONN.

Assets of the Common Fund, a nonprofit organization that manages investments for educational institutions, grew to more than $1-billion during 1982.

George F. Keane, president of the fund, said colleges and universities had added $40-million to their investments in the second half of the year, bringing the total value of the fund's assets to $1,027,900,000.

The Common Fund serves as a mutual fund for colleges, universities, and schools, with three types of investment: stocks, bonds, and short-term securities.

At the end of 1982, investments in the stock or equity fund amounted to $234.9-million; in the bond fund, $114-million; and in short-term investments, $679-million.

The Common Fund's equity investments showed a combined return from dividends and capital appreciation of 27 per cent for 1982, up sharply from the five-year average return of 19.5 per cent. Common Fund officials compared their return of 27 per cent with 27.3 per cent for the Dow Jones average of industrial stocks and 21.6 per cent for Standard & Poor's index of 500 stocks.

The Common Fund's bond investments showed a combined return from interest and capital appreciation of 27.5 per cent in 1982. The Salomon Brothers index of corporate bonds showed a total return for the year of 43.7 per cent. Officials of the Common Fund said the rates of return differed so dramatically because bonds in the Salomon Brothers index are all long-term bonds, with an average maturity of 24 years, compared with an average of 12 years for the Common Fund's holdings.

Short-term investments of the Common Fund showed a net return for the year of 12.9 per cent, compared with an average yield of 11.6 per cent for three-month Treasury Bills.

—JACK MAGARRELL

Medical Schools Urged to Stress Care of Elderly

WASHINGTON

Medical schools must revise their curricula to place more emphasis on the growing number of elderly people, says the Association of American Medical Colleges.

After a year-long study, the association last week issued a report and suggested guidelines for medical schools to use in preparing young physicians to deal with people over 65, who now make up 11 per cent of the population and are expected to make up 18 per cent by the year 2030.

By then, said John A. D. Cooper, president of the medical-college association, about 75 per cent of the nation's medical care is expected to be provided to the elderly.

"We don't believe 75 per cent of the nation's physicians should be geriatricians, but all doctors will have a heavy responsibility for care of the aging," said Dr. Cooper.

Instead of recommending that more courses on the elderly be added to curricula, the report suggests that increased attention be given throughout medical school to the medical and social problems of the elderly—in shaping the attitudes of medical students and in teaching all basic science and clinical courses.

Medical students are part of society and like the rest of society often have unflattering stereotypes about the elderly that are not supported by research, said Joseph Johnson, chairman of the department of medicine at the Bowman Gray School of Medicine of Wake Forest University and head of the 11-member committee that produced the report. Students need to realize, he said, that "sickness and disability are not inevitable consequences of advancing years; most elderly people can live active, independent lives."

But the elderly are different from younger patients in ways to which doctors must be sensitive, he said. For example, they may respond differently to drugs and may require different strategies for care, since the effects of disease may be combined with the normal effects of aging.

The guidelines recommended by the A.A.M.C. urge medical schools to:

▶ Increase the attention paid to the aging process and elderly patients by setting up "a group of faculty members interested in gerontology and geriatric medicine and training other faculty members in these areas."

▶ Seek expanded support for research on aging to allow schools to improve clinical care and stimulate medical students' interest.

▶ Offer medical students a variety of clinical settings and types of encounters with the elderly "through which students can learn special arrangements for the care, diagnosis, and treatment of the elderly."

▶ Arrange for medical students to meet healthy, independent elderly people.

▶ Encourage scientific groups and medical-specialty societies to develop and distribute educational materials dealing with the concerns of the elderly in their particular fields.

—CHERYL M. FIELDS

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TELECOURSE CONFERENCE '83
MARCH 30 — APRIL 1, 1983

WASHINGTON, D.C.

Telecourse Conference '83 is a dialogue of college educators, broadcasters and distributors seeking to improve the delivery of education to adult learners through emerging technologies. It is the sixth national conference examining techniques for reaching adult students effectively and economically through telecommunications courses.

Telecourse Conference '83 will be held at The Shoreham Hotel, March 30-April 1, 1983, in Washington, D.C., directly following the Annual Conference of the American Association of Higher Education (AAHE).

The conference will focus on management challenges facing those responsible for the changing, sophisticated methods of the delivery of telecourses, and will explore the impact via new technologies including cable and satellite deliveries.

For more informationn contact Telecourse Conference '83, Ann Kuhlke, Coast Telecourses, 10231 Slater Avenue, Fountain Valley, CA 92708 (714) 962-8861.

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A 6-Month Index to The Chronicle Begins on Page 67

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Articles on inside pages

Computers still have not found a comfortable place in the humanities classroom. Story on Page 10.

Westminster College in Utah will close on June 30—and reopen the next day as a "new" institution. Story on Page 11.

A case involving alleged sex bias in faculty salaries will test whether the federal Equal Pay Act applies to colleges. Story on Page 14.

The proportion of the U.S. defense budget earmarked for basic research has fallen. Story on Page 15.

Graduate students could be seriously hurt by President Reagan's budget proposals for fiscal 1984. Story on Page 15.

A specialist in sports law says universities with big-time sports programs will continue to be haunted by disputes over the status of scholarship athletes. Story on Page 17.

The Sports Academy does just about everything connected with athletics except field teams. Story on Page 17.

Binding arbitration may be the most important provision in a faculty contract. Story on Page 21.

Paul Fussell, author of *The Boy Scout Handbook and Other Observations*, sees life through the eyes of an infantryman. Story on Page 25.

Community-college teachers on strike in Quebec have defied emergency back-to-work legislation. Story on Page 19.

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Rising Costs of Health Benefits for Employees Worry Colleges

By SUZANNE PERRY

WASHINGTON

A proposal by the Reagan Administration to tax some health-insurance premiums has focused attention on a major concern in higher education: the escalating cost of providing health-care coverage to employees.

"I would say that in terms of nonacademic-related issues, health-care cost containment has got to be the primary financial problem today for colleges and universities," said Joyce A. Fecske, director of personnel at DePaul University.

Under the Reagan Administration's proposal, an employer's payments above $175 per month for health insurance for an employee's family, and above $70 for individual coverage, would be taxed as income to the employee. In the past such fringe benefits have not been taxed.

Although Ms. Fecske and other university officials interviewed by *The Chronicle* said they were not convinced that the proposal would do much to control medical expenses, they said the problem it is attempting to address is serious.

With health-care costs increasing faster than almost every other item on the Consumer Price Index—11 per cent in 1982—college and university budgets, like those of other employers, are being severely strained. In addition, health specialists say, more and more employees are availing themselves of increasingly sophisticated, expensive medical procedures such as coronary bypasses, which drive up the cost of health-insurance premiums.

266-Pct. Increase Since 1976

At DePaul, for example, medical-insurance costs have increased 266 per cent since 1976, said Ms. Fecske, who is chairman of the fringe benefits and services council of the College and University Personnel Association. The university's health-care budget for fiscal 1983 is $2.3-million, representing 5 per cent of tuition revenue, she said.

"We're going to have to make some changes," Ms. Fecske added. "This is just uncontrollable."

The University System of Georgia, which has a self-financed health-insurance plan, took the unusual step last month of increasing contributions to its reserves by 25 per cent for the second time this fiscal

Continued on Page 24, Column 3

Governors See Higher Education as Key to Economic Recovery

Colleges are called 'raw material in new industrial order'

By JACK MAGARRELL

Governors are putting increased emphasis on the role of higher education in the economic development of their states, especially in the competition to attract high-technology industries.

"There is a raw material in the new industrial order that is taking precedence over coal and iron," Colorado legislators were told by Gov. Richard D. Lamm. "That raw material is education. In a real sense, the education of today is the economy of tomorrow."

Only a few years ago, references to higher education were relatively rare in the catalogue of concerns that governors present in their annual messages to legislators.

As state lawmakers convened this winter for their 1983 sessions, economic hard times continued to overshadow all other problems. But in state after state, governors pinned their hopes for economic recovery on the colleges and universities.

Other common themes of the governors' budget and state-of-the-state messages this year included:

▶ State revenues continue to fall short of earlier projections. Even Alaska, whose petroleum riches have given it a general immunity to the economic problems faced by other states, expects revenues to decline by 21 per cent in the year ahead, because of the drop in world prices for oil.

▶ Most governors are not counting on a strong, early recovery of the national economy to raise state revenues.

Besides continuing to cut expenditures, many of them are asking for new taxes as an unavoidable necessity to balance their budgets.

In Idaho, where spending levels of state agencies this year are 16 per cent lower than in 1979, Gov. John V. Evans has rec-

Continued on Page 12, Column 1

U.S. Rules Out Future Support for Researcher

Strongest action yet in a case of fabricated data

By KIM McDONALD

WASHINGTON

The Department of Health and Human Services last week barred a former researcher at the Harvard University medical school from receiving future support from the agency because he fabricated data in experiments financed by the National Institutes of Health.

The action, recommended by James B. Wyngaarden, director of the N.I.H., was the strongest yet taken by the government against a medical researcher for falsifying data in federally financed research.

John R. Darsee, a former research associate in medicine at Harvard, will also not be permitted to serve on any N.I.H. peer-review panel or advisory committee for 10 years, the department said. In addition, the Brigham and Women's Hospital in Boston, at which Dr. Darsee conducted his experiments, has been asked to return $122,371 to the N.I.H., the full amount of the contract under which Dr. Darsee did his work.

Repeat Study Rejected

Mary L. Miers, a program analyst at N.I.H.'s office of extramural research and training, which investigated the incident, said her agency had never before asked an institution to repay the full amount of its grant or contract because of scientific fraud.

Although the Boston hospital, which is affiliated with Harvard, offered to repeat the research at its own expense, Dr. Wyngaarden declined the offer. He said the results of the animal experiments would not be comparable to those conducted by other institutions involved in the same research project.

"In this case, the whole study was useless," Ms. Miers said.

Dr. Darsee, who is now at Ellis Hospital in Schenectady, N.Y., could not be reached for comment. He was dismissed

Continued on Page 16, Column 3

BOB SWANSON

At a Catholic College, the Will to Survive

More than 60 Catholic colleges and universities in the U.S. closed between 1965 and 1980; today 240 survive. One of them is Saint Michael's College in Vermont, which has prospered as a result of sweeping changes made during the past 10 years.

An article on Saint Michael's and its blueprint for survival begins on Page 6.

Saint Michael's *Continued from Preceding Page*

here. There was a time, says the Rev. Paul E. Couture, a professor of religious studies, "when students were getting out of here with no Christian courses. We restructured the curriculum to guarantee as a Christian college that students would not leave here without at least hearing about religion."

Traditionally, Saint Michael's, like most other Catholic colleges, has depended on tuition and fees for income. Until recently, fund raising has been all but impossible for many of these colleges because of a widely held view that they were inferior academic institutions with graduates who worked in low-paying jobs.

"Today we have a legitimacy we did not have 30 years ago," says Mr. Henry, "and we have a clientele that is able to support us. Our alumni, who are first- and second-generation children of immigrants, are now chief executive officers of corporations. They will support the college because they are bound with strong ties of philosophical conviction, sentiment, and memories."

'Something in the Sock'

Mr. Henry says Saint Michael's is planning its first major fund-raising effort—probably a $5-million capital campaign—to coincide with the college's eightieth anniversary next year.

The college also has "a little something in the sock" because of the 66 townhouses it has built around the perimeter of the campus, says John Gutman, vice-president for operations.

"If enrollments decline and the apartments become vacant, we can rent them to the public to produce income," he says. "Or we could make them into condominiums and sell them if the college were in dire straits. They could produce a stream of cash or a lump sum if the institution needed either."

"Times will be tough in the 1980's. Saint Michael's will be vulnerable, as will other religiously affiliated colleges," predicts Ronald H. Provost, vice-president for academic affairs.

However, he says, "We have identified the things that make us unique. We know what we do well and what we don't do well. The Edmundites remain our tie with our past and with our future. And we have been successful for almost 80 years."

Missing Maryland College President Believed to Be Living in California

LA PLATA, MD.

Jay N. Carsey, the former president of Charles County Community College in Maryland who disappeared mysteriously last spring (*The Chronicle*, June 30, 1982), is believed to be alive and well and living in California.

Officials of the college have confirmed that a letter from Mr. Carsey bearing a San Rafael, Cal., postmark was received in January, eight months after his disappearance. In the letter, Mr. Carsey is said to have inquired about money owed him by the college and asked that such funds be sent to him in California through an intermediary.

It was the first communication from the former president since he disappeared last May, leaving behind his wife, home, and friends, as well as his job and what has been described as a prominent place in local society. Mr. Carsey, 47, was completing his eighteenth year in the presidency at the time. Observers suggested that he might have been "burned out" by the job. He sent the college's trustees a two-line post card of resignation, but offered no reasons for his actions.

The trustees, after determining that the college's finances were in order, named John M. Sine—then dean of the college and a longtime associate of Mr. Carsey's—to the presidency.

FACT-FILE

1981-82 Holdings of Research Libraries in U.S., Canada

University libraries †	Overall rank ‡	Volumes in library	Volumes added	Current serials	Spending for materials*	Spending for salaries*
Harvard U.	1	10,409,228	148,657	97,000	$5,782,416	$12,930,744
U. of California,						
Berkeley	2	6,117,424	189,651	102,265	4,169,260	11,670,545
Los Angeles	3	4,882,164	125,319	69,548	4,195,060	10,779,342
Yale U.	4	7,725,424	146,303	57,679	3,425,885	8,351,627
Stanford U.	5	4,889,448	117,805	46,455	4,732,935	9,875,649
U. of Toronto	6	4,789,740	165,860	44,007	4,037,714	10,740,980
U. of Texas	7	4,846,764	144,642	60,000	4,847,047	7,587,294
U. of Michigan	8	5,481,172	105,482	60,688	3,677,902	7,516,157
U. of Illinois	9	6,242,615	151,490	93,913	4,019,841	6,666,517
Columbia U.	10	5,192,448	81,691	59,604	2,672,123	7,033,156
Cornell U.	11	4,401,660	79,696	54,643	3,157,799	5,928,458
U. of Wisconsin	12	4,184,038	104,191	53,836	3,352,060	6,815,220
U. of Washington	13	4,084,741	69,737	40,698	2,750,266	6,008,284
U. of Minnesota	14	3,945,397	72,304	47,032	3,010,551	6,875,630
U. of Br. Columbia	15	2,307,541	90,520	32,213	3,113,900	7,330,954
U. of No. Carolina	16	2,839,858	117,059	39,593	3,520,990	4,945,302
U. of Arizona	17	2,741,442	102,401	31,797	3,996,488	4,494,089
Indiana U.	18	3,993,390	137,383	27,589	2,722,608	5,360,880
Ohio State U.	19	3,685,917	70,809	28,591	2,756,128	5,466,618
Princeton U.	20	3,430,242	66,960	30,927	2,898,532	5,377,077
Pennsylvania St. U.	21	2,272,980	65,882	22,735	2,607,972	5,593,252
U. of Chicago	21	4,565,591	124,279	47,419	2,004,950	4,380,778
New York U.	23	2,698,871	85,140	27,925	2,345,301	4,840,161
U. of Virginia	23	2,466,753	75,168	25,003	2,693,004	4,415,944
U. of California, Davis	25	1,753,213	71,668	45,207	3,002,697	4,946,113
U. of Pennsylvania	26	3,054,234	53,584	30,971	1,915,557	4,750,748
Rutgers U.	27	2,024,215	53,188	21,769	2,466,182	5,859,020
U. of Alberta	28	2,231,193	84,737	14,594	2,879,623	5,631,029
U. of Florida	28	2,285,945	54,436	31,477	2,446,470	4,254,577
Duke U.	30	3,084,412	75,062	29,126	2,533,703	4,098,134
State U. of New York, Buffalo	30	2,137,941	157,214	22,562	2,203,365	3,615,521
Northwestern U.	32	2,889,402	66,963	32,606	2,244,989	4,780,315
U. of Georgia	33	2,141,617	79,118	43,568	2,590,782	3,254,741
U. of So. California	34	2,170,774	65,385	33,021	2,525,300	4,199,694
Michigan State U.	35	2,807,156	92,929	20,301	2,296,850	3,917,646
Howard U.	36	1,242,553	63,359	21,402	3,356,216	6,084,260
U. of Kansas	37	2,251,917	62,565	27,812	2,603,008	3,578,659
U. of Pittsburgh	38	2,386,504	47,262	17,702	1,949,305	3,941,781
U. of California, Santa Barbara	39	1,473,308	56,641	19,275	2,383,000	5,192,000
U. of Iowa	40	2,412,577	56,481	29,891	2,794,902	3,299,971
U. of Maryland	41	1,516,990	44,959	19,632	2,199,359	3,951,840
U. of California, San Diego	41	1,507,875	48,270	27,904	2,248,442	4,264,153
U. of Hawaii	43	1,852,813	66,478	32,380	2,053,661	3,447,575
Louisiana State U.	44	1,952,245	67,589	21,524	2,968,631	2,910,595
McGill U.	45	2,127,348	58,781	14,802	1,684,986	5,526,192
Boston U.	46	1,395,964	48,621	24,908	2,249,999	2,843,436
Arizona State U.	47	1,597,140	70,119	19,375	2,384,753	2,889,674
U. of Kentucky	48	1,854,088	37,306	34,624	2,058,863	2,801,186
Southern Illinois U.	48	1,716,213	47,678	20,364	1,878,751	3,530,919
Syracuse U.	50	2,010,009	57,415	20,430	1,600,356	2,722,169
Massachusetts Inst. of Technology	51	1,869,173	24,722	19,843	$1,598,201	$3,417,969
Johns Hopkins U.	52	2,369,926	25,999	19,541	1,988,897	2,856,873
U. of Western Ontario	52	1,403,508	48,206	21,000	2,002,798	3,898,667
U. of Missouri	54	2,117,156	48,368	21,588	1,873,419	2,338,918
U. of Cincinnati	55	1,330,758	52,201	18,229	1,815,229	3,597,393
Washington U. (Mo.)	55	1,883,737	42,037	15,558	1,829,571	2,566,808
Virginia Polytechnic Inst. and State U.	57	1,334,979	49,364	21,635	2,117,884	2,605,973
Brigham Young U.	58	1,574,100	50,593	16,707	n/a	n/a
Texas A&M U.	59	1,403,513	45,293	15,223	1,983,573	2,609,301
Purdue U.	60	1,503,098	33,534	17,755	1,766,215	3,204,861
U. of Nebraska	61	1,602,671	55,459	20,859	1,757,449	2,312,896
Temple U.	61	1,683,308	42,251	14,972	1,569,268	3,304,504
U. of South Carolina	61	1,949,985	55,721	16,203	1,711,552	2,412,976
Emory U.	64	1,736,191	46,642	15,737	1,926,858	2,410,377
Georgetown U.	65	1,343,971	55,956	17,761	1,751,429	2,846,335
York U.	66	1,379,915	50,955	20,017	1,428,184	3,107,084
Washington St. U.	66	1,304,500	38,521	30,850	1,548,762	2,754,484
U. of Colorado	68	1,927,699	39,492	19,441	1,730,097	2,739,438
Brown U.	69	1,804,982	41,603	14,251	1,590,306	2,605,305
U. of Houston	70	1,311,174	51,037	14,995	1,615,209	2,606,102
Florida State U.	71	1,413,613	42,874	15,541	1,636,511	2,638,899
Vanderbilt U.	72	1,483,428	34,396	16,315	1,617,705	2,351,223
U. of California, Irvine	73	1,023,518	40,139	14,228	1,920,818	3,191,991
Iowa State U.	73	1,447,350	45,830	20,054	1,944,711	2,536,389
U. of Oklahoma	75	1,903,996	45,338	16,957	1,823,880	2,383,598
U. of Miami	76	1,411,297	31,847	17,283	1,598,648	2,699,647
State U. of New York, Stony Brook	76	1,321,278	48,495	18,579	1,727,393	2,497,453
Wayne State U.	78	1,904,207	25,518	13,525	1,335,424	3,669,072
U. of Tennessee	79	1,421,342	29,333	24,320	1,452,034	2,382,739
U. of Utah	79	2,015,662	25,662	16,125	1,545,081	2,427,000
U. of Massachusetts	81	1,870,049	66,402	12,510	1,501,324	2,774,418
U. of Oregon	82	1,540,340	37,936	20,000	1,762,787	2,186,581
U. of Rochester	83	1,871,675	37,588	14,953	1,157,223	2,462,488
McMaster U.	84	1,233,720	47,033	13,016	1,992,497	2,549,673
Queen's U.	85	1,449,059	38,335	13,215	1,474,236	2,666,019
U. of Connecticut	86	1,746,946	57,438	16,276	1,496,816	2,842,162
U. of New Mexico	87	1,086,529	42,593	15,878	1,374,232	2,246,383
U. of Manitoba	88	1,251,077	34,024	12,174	1,291,677	3,394,897
State U. of New York, Albany	89	1,027,943	47,479	15,436	1,454,997	2,122,035
Dartmouth C.	90	1,475,654	41,716	18,098	1,376,022	1,902,232
U. of California, Riverside	91	1,075,121	41,944	13,977	1,517,408	2,628,958
U. of Alabama	92	1,473,135	42,582	12,729	1,609,716	1,573,196
Tulane U.	93	1,427,366	28,021	12,518	1,368,797	1,972,873
U. of Guelph	94	1,340,750	102,175	9,104	1,363,000	2,244,000
Colorado State U.	95	1,315,520	37,358	16,029	1,166,275	2,202,154
U. of Saskatchewan	96	1,083,069	44,921	10,184	1,292,216	2,171,192
U. of Notre Dame	97	1,499,252	35,583	10,852	1,307,972	1,790,098
Case Western Reserve U.	98	1,410,669	18,231	13,404	1,140,941	2,132,216
Kent State U.	98	1,437,457	40,542	8,706	970,715	2,163,198
Rice U.	100	1,109,797	37,983	11,675	1,390,502	1,472,297
Oklahoma State U.	101	1,307,732	29,903	14,196	1,272,485	1,455,172

† Libraries are not supposed to report figures for their branch campuses.

‡ Based on an index developed by the Association of Research Libraries for quantitative comparisons. The index takes into account volumes held; gross number of volumes added; microforms held; current serials received; expenditures for library materials, binding, salaries and wages, other operating costs; and number of professional and nonprofessional staff members.

* Figures for Canadian libraries are expressed in U.S. dollars.

n/a Data not available.

SOURCE: ASSOCIATION OF RESEARCH LIBRARIES

Note Pad

President Reagan put heavy emphasis on the responsibility of parents for financing their children's college education in his budget proposals for fiscal 1984. But some officials of the Education Department don't think that principle applies as much to graduate education.

Edward M. Elmendorf, Assistant Secretary for postsecondary education, told a recent meeting of graduate-school officials that he agreed with a widely held view that the role of the family in financing education diminishes after children receive their undergraduate degrees.

"Speaking as a parent," he said, "I don't feel I should continue the funding for my son or daughter when they go to graduate school."

That view may be reflected in rules the Education Department is now drafting to tighten the standards used to determine when students who apply for federal aid are considered "self-supporting." Such students are usually eligible for more federal aid because their parents' income is not taken into account.

Some proposals to tighten the standards have been criticized because they would make it more difficult for many graduate students who are truly self-supporting to qualify for aid. But Mr. Elmendorf told graduate-school officials that the Education Department was looking for ways to tighten the definition of financial independence without penalizing needy graduate students.

■

An early supporter of the National Institute of Education has had second thoughts about the agency.

Chester E. Finn, Jr., who as a White House assistant in 1970 helped draft the Nixon Administration's proposal to establish the N.I.E., has called for the abolition of the institute in an article in the February issue of *Phi Delta Kappan* magazine.

"The political, intellectual, and organizational ailments from which [the N.I.E.] has suffered since its inception a decade ago are incurable," said Mr. Finn, who is now a professor of education and public policy at Vanderbilt University.

One of the institute's "fundamental failings," Mr. Finn said, is that "ideology has become the principal determinant of the N.I.E. research agenda." Although the Reagan Administration has frequently been accused of imposing a conservative ideology on the institute, Mr. Finn said the Carter Administration's "fixation on 'equity' " in evaluating research was just as ideological.

■

In the same issue of *Phi Delta Kappan*, however, an official of the American Educational Research Association defended the N.I.E., saying the agency's budget had been cut "just as it reached its highest levels of productivity and usefulness."

David H. Florio, director of governmental relations for the association, contended that abolishing the N.I.E. would return educators "to the days of fragmented, small-scale studies, when educational research lacked a clear national focus."

Washington

Pentagon's Spending for Basic Research Fails to Keep Pace with Applied R&D

By KIM McDONALD

WASHINGTON

Although President Reagan's emphasis on military strength has resulted in substantial budget increases for the Pentagon's research-and-development programs, the proportion devoted to basic research has dropped, from 4 per cent in the 1970's to an estimated 2.9 per cent next year.

Last month, for example, Mr. Reagan recommended that $29.9-billion be spent on military research and development in fiscal 1984, a 29-per-cent increase over the $23.2-billion expected to be spent this year.

But Mr. Reagan's request for $850-million for the basic, or non-applied, portion of the research budget in fiscal 1984 would be just 9 per cent more than the $779-million the Pentagon will spend this year.

Over all, Pentagon spending on basic research at universities, as well as on applied research and development, has steadily increased since the mid-1970's.

This year universities will receive an estimated $332-million for basic research and $465-million for applied research-and-development work from the Defense Department, about $100-million more than they received for those purposes in fiscal 1982.

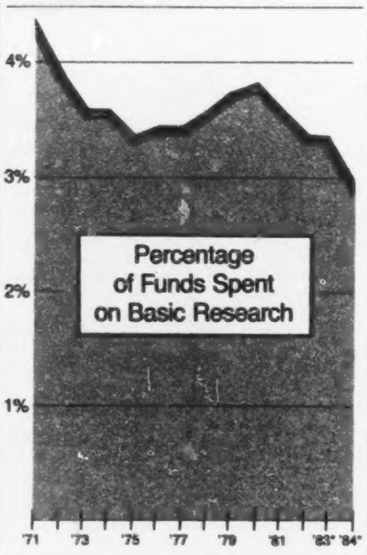
But actual increases for fundamental military research, Pentagon officials say, have not kept pace with the growth in the Defense Department's applied research-and-development programs.

Leo Young, director of the Pentagon's university research office, said the Pentagon's basic-research program, which distributes about half of its money to universities, has grown by about 6 percentage points more than the rate of inflation since fiscal 1982. However, because two-thirds of the increase was due to a new $30-million program to replace obsolete research equipment at universities, he said, the real growth in the Defense Department's basic-research effort was only 2 percentage points.

Since 1970 basic research has accounted for about 4 per cent of the agency's research-and-development budget.

Figures provided by the National Science Foundation indicate that the Defense Department's spending on basic research would drop to 2.9 per cent of the total military research-and-development budget if Congress approves Mr. Reagan's request for fiscal 1984.

How Defense Dept. Spends Research Funds



Fiscal year	Basic research	All research & development
1971	$322,139,000	$ 7,509,036,000
1972	328,774,000	8,318,145,000
1973	306,711,000	8,404,214,000
1974	302,943,000	8,420,386,000
1975	300,065,000	9,012,472,000
1976	326,885,000	9,654,722,000
1977	373,254,000	10,963,351,000
1978	410,410,000	11,553,638,000
1979	471,527,000	12,506,225,000
1980	540,341,000	13,981,012,000
1981	604,285,000	16,508,649,000
1982	685,600,000	20,575,600,000
1983*	768,600,000	23,179,200,000
1984*	867,300,000	29,881,900,000

* Estimated

SOURCE: NATIONAL SCIENCE FOUNDATION

Since the early 1970's Congress has also restricted the Pentagon to supporting research with "potential application" to military use. As a result, the Pentagon's basic research effort is focused in such areas as electronics and laser studies. It does not support as wide a variety of research projects as the National Science Foundation does, for example.

George A. Keyworth, II, President Reagan's science adviser, said in an interview that he had hoped to increase substantially the Pentagon's spending for basic research when he assumed his post two years ago. But, he said, re-establishing the strong research ties that universities had with the Pentagon in the 1950's but lost during the Vietnam War years "is happening much more slowly than I hoped."

"I had looked forward to the Defense Department's playing a major role [in supporting academic research], because I still remember and look back at the era when the Defense Department was probably the most excellence-oriented supporter of basic research this country every had," he said.

"But I think it's going to take a long time. I think the Pentagon makes a contribution [to academic research], but I don't look to it to make the major contribution for several years."

Part of the reason that spending on basic research has not been growing more may be the cost of increasingly sophisticated and expensive weapons systems, which have accounted for much of the growth in the Pentagon's development budget, an analyst at the Congressional Budget Office said.

A Victim of Politics

Other observers say that basic research has also been a victim of politics, since the officials with the most political clout favor equipment purchases more than research.

"When the Pentagon budget goes up, the main motivation is to buy more hardware," said a Defense Department official.

Congress has tended to reduce the President's requests for military spending each year, giving the Defense Department, unlike most agencies, less to spend on basic research than the President asked for.

For the current year, fiscal 1983, Congress reduced Mr. Reagan's request for basic military research, approving a 12-per-cent increase over 1982 instead of the 19-per-cent increase the President requested.

But Mr. Reagan's request for a 9-per-cent increase in spending on basic research for fiscal 1984—only about 4 percentage points more than projected rate of inflation—makes the prospects for real growth in military basic research next year, "very worrisome," Mr. Young said.

Graduate Schools Call Reagan Budget 'Shortsighted'

By JANET HOOK

WASHINGTON

Officials of graduate and professional schools contend that their students would get a raw deal under President Reagan's budget proposals for fiscal 1984.

The officials, who met here last week to discuss the issue, criticized as "shortsighted" Administration proposals to reduce or eliminate several key sources of aid for graduate and professional students in the Departments of Education and Health and Human Services.

"President Reagan has characterized his proposed 1984 budget as 'strong medicine,' " said Richard Black, chairman of the Graduate and Professional Financial Aid Council. "For graduate and professional students, the Administration's budget is a bitter pill to swallow."

At a meeting sponsored by the council, which advises the Educational Testing Service, university officials were particularly critical of the Administration's proposal to require graduate students to pay a 10-per-cent fee on Guaranteed Student Loans—double the percentage now paid by all borrowers.

John R. Kramer, dean of Georgetown University's law school, called the proposed fee increase "a gimmick without justification other than cutting costs."

Last year the Administration met widespread opposition when it proposed barring graduate students from receiving guaranteed loans and requiring them to borrow under another, more expensive federal loan program. Although graduate-school

Continued on Following Page

8.3-Pct. Salary Increase Reported for Continuing Faculty Members

Average salaries in higher education for continuing faculty members—those employed fulltime by the same colleges and universities both this year and last year—are 8.3 per cent higher in 1982-83, according to preliminary data reported by the American Association of University Professors. The average gain in 1981-82 was 10.1 per cent.

The Chronicle Survey, which was not limited to continuing faculty members, found a 7.6-per-cent average increase for 1982-83, compared with a gain of 8.4 per cent for 1981-82 (*The Chronicle*, January 5).

The A.A.U.P.'s data were prepared by Maryse Eymonerie Associates, based on information from a sample of 1,159 institutions. The following table shows the percentage increases for 1982-83 over 1981-82 for continuing faculty members in various ranks.

	Public institutions	Church-related institutions	Other private institutions	All institutions
Ph.D.-granting universities				
Professor	7.4%	9.9%	10.5%	8.1%
Associate professor	7.8%	10.9%	10.7%	8.4%
Assistant professor	8.8%	11.1%	12.7%	9.5%
Instructor	8.8%	11.7%	11.9%	9.3%
All ranks	7.8%	10.6%	11.0%	9.3%
Institutions granting other graduate degrees				
Professor	6.3%	8.3%	10.3%	7.3%
Associate professor	7.0%	7.9%	10.5%	7.7%
Assistant professor	7.6%	8.9%	10.5%	8.8%
Instructor	7.8%	8.7%	10.5%	8.3%
All ranks	6.9%	8.4%	10.4%	7.7%
Institutions granting only the bachelor's degree				
Professor	6.4%	8.3%	9.5%	8.7%
Associate professor	6.9%	8.9%	9.8%	8.9%
Assistant professor	7.5%	8.8%	11.1%	9.4%
Instructor	6.4%	8.7%	8.0%	8.0%
All ranks	6.9%	8.7%	9.9%	8.0%
2-year colleges				
Professor	7.4%	7.8%	7.4%	7.4%
Associate professor	7.8%	7.8%	7.6%	7.8%
Assistant professor	8.1%	9.5%	8.1%	8.1%
Instructor	10.2%	8.3%	14.1%	9.5%
All ranks	8.1%	8.6%	9.3%	8.1%
Institutions without academic ranks	7.5%	8.3%	10.8%	7.6%
All institutions except those without academic ranks				
Professor	7.1%	8.7%	10.3%	7.9%
Associate professor	7.5%	9.1%	10.4%	8.2%
Assistant professor	8.2%	9.3%	11.5%	9.0%
Instructor	8.6%	9.1%	9.7%	8.7%
All ranks	7.5%	9.0%	10.5%	8.3%

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Health Care

Continued from Page 1

year. Such increases are usually made only once a year, in July, said Jacob H. Wamsley, assistant vice-chancellor for fiscal affairs, but rising medical claims forced officials to act in January. At the same time, the system increased the plan's deductible—which had been a flat $100 per year—to $150 for hospital costs, $150 for nonhospital costs, and $50 for each hospital admission.

Mr. Wamsley said the system's average monthly claims for the 12-month period ending in January had increased 19 per cent over the previous 12 months.

The Reagan Administration's tax proposal, which was included in the President's 1984 budget message, is aimed in part at containing costs by making comprehensive, expensive health-insurance plans less attractive to employees. According to officials at the Department of Health and Human Services, about 30 per cent of employees with employment-based health coverage would pay taxes under the Administration's plan.

A recent survey of 17 colleges and universities in the Northeast found that monthly employer health-insurance contributions ranged from $84 to $205 for family coverage, and $37 to $82 for single coverage.

Opposition by Faculty Groups

Officials of the American Association of University Professors, the National Education Association, and the American Federation of Teachers (A.F.L.-C.I.O.) said their organizations opposed taxing health-care benefits because it would amount to reducing faculty income.

"Any further cuts in either fringe benefits or real dollars in terms of salaries is going to seriously affect the economic status of faculty," said Alfred D. Sumberg, director of government relations at the A.A.U.P.

Gerald D. Morris, assistant director of legislation at the A.F.T., said the proposal would disrupt collective-bargaining agreements on health insurance. He said it was simplistic to blame employees, rather than providers of health care, for rising costs.

The A.F.T. and the N.E.A. are affiliated with the Health Security Action Council, a coalition of labor, business, civic, and other organizations that is proposing legislation for a comprehensive cost-containment plan called Health Action to Limit Takeaways (H.A.L.T.).

Meanwhile, some universities are emphasizing preventive health care. Fred L. Petersen, director of personnel administration at the University of Utah, said his institution had:

► Given employees copies of the book *Take Care of Yourself: A Consumer's Guide to Medical Care*, by Donald M. Vickery and James F. Fries (Addison-Wesley Publishing Co., Reading, Mass. 01867; 269 pages; $18.95 hardcover, $9.95 paperback; 1976).

► Established a blood-pressure clinic and arranged for a doctor to be available one day a month to see employees referred by the clinic.

► Planned for university health experts to write a series of articles for employees about medical topics.

Georgia's Mr. Wamsley said universities could save substantial amounts by strictly monitoring health-insurance claims to make certain that employees who are covered under another plan (a spouse's, for example) are not receiving combined benefits exceeding the total cost.

Towards Equitable Education for Women and Men:
Models From the Past Decade
March 11 & 12, 1983
Skidmore College, Saratoga Springs, New York

A conference
designed to focus on the implications, during the past decade, of the decisions of colleges and universities to become coeducational or to remain single-sex institutions. The goal of the conference is to examine how those decisions have affected educational programs, co-curricular life, and the larger society.

Conference Highlights

Friday, March 11
9:00-11:00 AM CONFERENCE REGISTRATION
11:00-12:30 PM OPENING PANEL: *"Four College Presidents on Single-Sex Versus Coeducation: The Rationales"*
Panelists: *Ruth Schmidt, President, Agnes Scott College*
Rhoda Dorsey, President, Goucher College
Lewis Salter, President, Wabash College
John Chandler, President, Williams College
Moderator: *Joseph Palamountain, President, Skidmore College*

12:30-2:00 PM Lunch
2:00-5:30 PM CONFERENCE SESSIONS
2:00-3:30 I. Historical Perspectives on Coeducation
II. Institutional Decisions: From Single-Sex to Coeducation
III. Institutional Decisions: Single-Sex and Coordinate Structures
IV. Perspectives on Faculty

4:00-5:30 I. Curricular Case Studies
II. The Truly Non-Sexist Curriculum: Where is it? The Smith Project on Women and Social Change
III. Women's Studies: Institutional Examples
IV. Student Leadership

5:30-8:00 PM Dinner

8:00 PM **FEATURED SPEAKER: *GLORIA STEINEM***
Conference Reception following

Saturday, March 12
9:00-12:30 PM CONFERENCE SESSIONS
9:00-10:30 I. Educational Aspirations and Life Goals
II. Gender Studies
III. Sex Role Attitudes: Classroom and Collegial Interactions
IV. Coeducation and Women's Values

11:00-12:30 I. The Dilemma of Catholic Coeducation: The Boston College Study
II. Women in Science
III. Gender Dynamics: Campus and Classroom
IV. Reconstructing the American Literary Canon

12:30-2:00 PM Lunch
2:00-3:30 PM CLOSING PANEL: *"TOWARDS A NON-SEXIST EDUCATION"*
Panelists: *Jean Howard, Department of English, Syracuse University*
Florence Howe, Director, The Feminist Press
Elizabeth Tidball, Department of Physiology, Medical Center, George Washington University
Moderator: *Susan Kress, Department of English Skidmore College*

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News Summary

Articles on inside pages

Private colleges and universities are trying out new ways to increase their revenue—including starting up profit-making businesses. Story on Page 5.

Competency tests employed to certify schoolteachers are keeping many blacks from entering the profession. Story on Page 7.

Lobbying by higher-education groups and other nonprofit organizations that receive federal grants would be limited by new government rules. Story on Page 9.

Houston, a city that likes to have "the biggest and the best of everything," can be a congenial place for academics. Story on Page 23.

Herschel Walker, the University of Georgia football player who won last year's Heisman Trophy, has signed a pro contract even though he had a year of eligibility left in the college sport. Story on Page 15.

Salaries of college administrators may be increasing at a slower rate than those of faculty members, data from a new survey suggest. Story on Page 21.

Teachers at Quebec's community colleges have returned to work after a strike that lasted more than three weeks. Story on Page 19.

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A THREAT TO INTEGRITY?

Gambling on College Games Said to Be Up Dramatically

By ANGUS PAUL

Gambling on college sporting events appears to be growing dramatically, say observers ranging from college officials to bookmakers. Opinion is sharply divided, however, on whether the situation poses a threat to the integrity of college athletic programs, and what remedies, if any, the institutions should consider.

The National Collegiate Athletic Association, which thinks gambling is on the rise, has formed a committee to keep an eye on what's happening, says David E. Cawood, an assistant executive director of the N.C.A.A. and a member of the committee.

Gambling in general is increasing "phenomenally," and betting on college contests is keeping pace, says Sonny Reizner, director of the sports book (where people place bets on athletic contests based on posted odds) at the Castaways Casino in Las Vegas.

Mort Olshan, editor and publisher of the *Gold Sheet,* a weekly betting publication, argues that wagering on games is legitimate recreation for the millions of Americans "who enjoy the excitement of challenging the oddsmakers."

Bill Esposito, sports-information director for St. John's University in New York, takes a different view. He thinks betting has brought about a situation in which point-shaving (players keeping the score of a game closer than the gambling line predicted) affects at least some college contests in all 50 states, although he acknowledges that the assertion is impossible to document.

On the other hand, Will Jones, the head basketball coach at the University of the District of Columbia, says that even if point-shaving has gone on undetected—which he doubts—it involves only a tiny minority of college athletes.

Scandal Called Inevitable

Some observers, including Billy Packer, a basketball commentator for CBS-TV, warn that a repetition of the point-shaving scandals involving college teams in 1951, 1961, and 1981 "could destroy college basketball." (In those scandals, players on a total of some 30 college teams were accused of deliberately keeping scores down in collaboration with gamblers.)

Mr. Packer and Al McGuire, basketball commentator for NBC-TV, put together a film on gambling and college sports called "Sell Out!" Coaches, law-enforcement officials, and former players interviewed in the film believe another scandal is inevitable.

Observers such as Chris Wallace, the editor and publisher of the *Blue Ribbon*

Continued on Page 16, Column 1

College Students Said to Require $1-Billion a Year for Computing

To get to that level, spending would have to be tripled

By JACK MAGARRELL

WASHINGTON

The price tag for meeting the computer needs of American college students is now estimated at roughly $1-billion a year.

An authority on the use of computers in college-level instruction says students need about four times as much access to computers as they are getting.

To meet that need, colleges and universities would have to triple their present levels of spending for equipment, programs, and faculty members in the computer field, says Robert G. Gillespie, vice-provost for computing at the University of Washington.

Mr. Gillespie, who directed a 1981 study on computers in higher education for the National Science Foundation, presented his assessment in testimony before the Science and Technology Committee of the U.S. House of Representatives.

Colleges and universities now spend about $300-million a year for use of computers in instruction, Mr. Gillespie said. He estimated that meeting the needs for student access would cost $1-billion or more a year.

"Essentially," he said, "we would need to spend at least as much money for computing as we spend on libraries—about $100 per student."

Another witness before the committee

Continued on Page 6, Column 1

Court to Decide Case on Title IX and Student Aid

Grove City College wins review that U.S. opposed

By CHERYL M. FIELDS

WASHINGTON

Grove City College will have a chance to try to convince the Supreme Court that it is not covered by a federal law barring sex bias because it accepts no direct federal aid.

The Supreme Court announced last week that it would review a decision by the U.S. Court of Appeals for the Third Circuit, which ruled last year that the college was subject to Title IX of the Education Amendments of 1972 because it receives federal financial assistance through the Pell Grants its students get.

Title IX bars sex bias in "federally assisted education programs or activities."

Oral arguments in the case are not expected to be scheduled until the Court's next term begins in October.

The Grove City case arose in 1976 when the Department of Education threatened to bar the college's students from receiving federal financial aid unless the college signed an "assurance form" promising to obey Title IX.

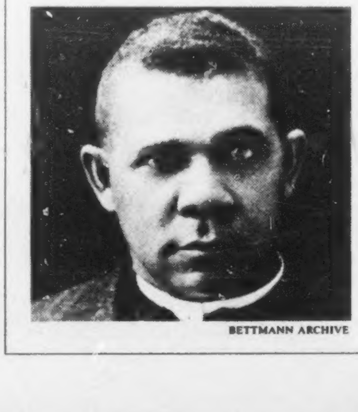
The college refused, saying that it did not accept direct federal aid and should not be considered a recipient of federal assistance simply because its students receive money from the government.

Justice Dept. Opposed Appeal

The Department of Justice urged the Court not to accept the case, saying that the only issue before the Third Circuit was whether the college should be considered a recipient of federal aid. The circuit court was "clearly correct" in deciding that it was, the Justice Department said, and the case should rest there.

Besides that issue, however, the college is challenging a section of the Third Circuit's opinion that deals with whether Title IX's bar on sex bias in "federally assisted education programs or activities" should be interpreted so that the entire institution is considered an "education program"—or whether the ban on bias applies only to

Continued on Page 12, Column 1



BETTMANN ARCHIVE

Scholarly Books for Spring

Alcoholism, old age, and Dracula are among the topics scholars treat in books to be published this spring. Also on the agenda: Soviet Russia—its past, present, and future; the history of China; and a biography of Booker T. Washington (left).

A preview of those and other forthcoming scholarly books begins on Page 27.

'In' Box

A comprehensive national study of retirement benefits for college and university employees is in the offing, according to a law professor at the Georgetown University Law Center who has discussed the idea with several major foundations.

The professor, Roy A. Schotland, recently completed his own critical review of the pension programs offered by the Teachers Insurance Annuity Association and the College Retirement Equities Fund. His report is scheduled to be published in May, along with a formal response from T.I.A.A. and C.R.E.F., by the National Association of College and University Business Officers.

An outspoken critic of the management and investment performances of T.I.A.A. and C.R.E.F., Mr. Schotland says the national study is likely to range well beyond concerns that have led more than a score of colleges and universities to begin offering alternatives to those companies' annuity plans. He says the study could take a year or two, and that he hopes it will cover such issues as:

▶ The relationship between an employee's preretirement income and the benefits he ultimately receives.

▶ Whether retirement programs should be extended to include "defined benefit" plans, which link benefits to a retiree's past salary level rather than to the investment earnings of a retirement account.

▶ How much colleges should contribute to retirement accounts.

▶ Whether retirees should be able to elect full lump-sum payments at retirement—an option they don't have now.

■

Grant seekers who customarily visit their college or university libraries for information about fellowships and research funds may also wish to inquire at the campus development office. That's where the Academic Research Information Service says it mails most of its reports to subscribers every six weeks.

The company publishes a newsletter, the *ARIS Funding Messenger*, in each of three areas: the creative arts and humanities, the social and natural sciences, and the medical sciences. An unusual feature, says Betty L. Traynor, president of ARIS, is a listing of inventions and products needed by major corporations, obtained from the Rain Hill Group, a New York-based service company.

For details: ARIS, 2940 16th Street, Suite 314, San Francisco 94103.

■

Free listings for American and British faculty members who would like to exchange homes are provided in *Faculty Home Exchange*, a quarterly directory sold to college and university libraries in both the U.S. and Britain.

The directory is published by H. Clyde Hostetter, a professor of journalism at California Polytechnic State University at San Luis Obispo. For a registration form, send him a self-addressed, stamped envelope at 48 Los Palos Drive, San Luis Obispo, Cal. 93401. (The directory's next deadline: March 21.)

Personal & Professional

Administrators' Salaries Are Up 6.4 Pct. Since 1981-82, Trailing Faculty Gains

By ROBERT L. JACOBSON

WASHINGTON

The salaries of college and university administrators, while continuing to go up faster than the cost of living, appear to have grown at a slower rate in the past year than those of faculty members.

According to the latest annual "compensation survey" by the College and University Personnel Association, median salaries of administrators at 1,487 responding institutions have risen 6.4 per cent since 1981-82, compared with a 10-per-cent gain the previous year.

In contrast, last fall's Chronicle Survey of faculty salaries for 1982-83 found an average increase of 7.6 per cent, compared with a rise of 8.4 per cent the previous year.

Preliminary salary data from the American Association of University Professors show a slightly higher gain this year—8.3 per cent—for full-time faculty members employed by the same institutions they worked for last year.

The federal government's Consumer Price Index went up 3.9 per cent in 1982 and 8.9 per cent in 1981.

Reversal of Previous Practice

All of those numbers, although not entirely comparable, suggest that over the past year colleges and universities have generally reversed their previous practice of rewarding administrators somewhat more than faculty members.

One interpretation of the data, said Stephen S. Miller, executive director of the personnel association, is that administrators are now "bearing the brunt" of higher education's budgetary problems. He said in an interview that he sensed a feeling among college officials that "we've got to help the faculty."

"I don't think we've been in this position before," Mr. Miller added.

The personnel association's latest survey found greater gains in administrative salaries at public institutions (6.6 per cent) than at private institutions (5.6 per cent). These are some other comparative findings for median salaries this year:

A table of median salaries for administrative positions in colleges and universities appears on Page 26.

▶ They are up 6.5 per cent at two-year colleges, 6.2 per cent at universities, and 4.7 per cent at four-year colleges.

▶ By job category, salaries increased the most in executive affairs (8.3 per cent), followed by administrative affairs (7.9 per cent), external affairs (7.2 per cent), academic affairs (6.5 per cent), and student affairs (4.2 per cent).

▶ Administrators who were promoted or transferred to other positions within their institutions were paid 3 per cent more, on the average, than were those hired from outside the institutions.

▶ The salaries of administrators who are members of minority groups are about 37 per cent lower than those of other administrators.

▶ Women's salaries are about 45 per cent lower than men's.

This year, for the first time, the report of the survey includes supplementary tables on salaries for "second line" administrative positions, such as assistant to the president, payroll manager, associate director of food services, and admissions counselor. In all, 36 such positions are covered for various types of colleges and universities.

Comparing the data with those for the principal positions, the survey found smaller salary differences in the secondary categories between minority groups and others, and between women and men.

An appendix to the main report shows the distribution of salaries for nearly 36,000 administrators in 94 job categories. The highest paid among them include two deans of medicine earning at least $150,000 a year and 23 others earning $100,000 or more, two chief executives of higher-education systems earning $135,000 to $140,000, and the heads of two separate institutions whose salaries are between $140,000 and $146,000.

At the other extreme, the data show 268 administrators earning less than $10,000 a year. They include 43 nurses in charge of student-health services, 40 bookstore directors, 22 campus chaplains, and 13 directors of campus security.

Mr. Miller said there was some concern in the personnel association that the survey data, presented in more than 100 tables, could be misused by campus officials and politicians if they failed to compare salaries at institutions like their own when trying to determine how well particular administrators are being paid.

Cautionary Note

Because of that, he said, a cautionary note was added to the report. It says that summary data for all institutions "should be used only to obtain a broad overview" of salaries for different positions.

Copies of the report, *1982-1983 Administrative Compensation Survey*, may be ordered from the College and University Personnel Association, 11 Dupont Circle, N.W., Suite 120, Washington 20036. The price is $25 for members of the association, $75 for nonmembers participating in the survey, and $150 for others.

The supplement on salaries in second-line positions may be ordered separately. Its price is $10 for association members, $25 for nonmember participants, and $50 for others.

In addition, the association is advertising "customized" analyses of its survey data so that college officials can more closely compare their administrators' salaries with those of administrators at other institutions.

Further information is available from Mr. Miller at (202) 462-1038.

Cost Estimates for 'Unisex' Pensions Disputed

By CHERYL M. FIELDS

WASHINGTON

The sponsor of a bill to outlaw discrimination in insurance coverage last week accused the Teachers Insurance and Annuity Association and the College Retirement Equities Fund, among other insurance companies, of making "wildly exaggerated" claims about the cost of equalizing premiums and benefits.

Rep. John D. Dingell, Democrat of Michigan and chairman of the House Committee on Energy and Commerce, said that T.I.A.A. and C.R.E.F., which provide pension plans for about 1,500 colleges and universities, had estimated that ending sex discrimination in its annuities would cost $3.2-billion.

But, he said, a recent study by the Labor Department indicated that even if that figure were correct, it would cost only $23-million annually, or "$6,764 for each of the 3,400 educational institutions served by T.I.A.A.-C.R.E.F." The companies provide pension plans for private schools and research organizations in addition to colleges and universities.

The companies' estimate is exaggerated, he added, "since T.I.A.A.-C.R.E.F. has for years consistently used its high earnings to pay its annuitants much more than the sex-based guarantees contained in their contracts. Hence, T.I.A.A.-C.R.E.F. can, by its dividends, pay its annuitants on a gender-neutral basis without a single additional cent having to come from any of the colleges and universities it serves."

Denial by TIAA-CREF Spokesman

A spokesman for the two companies, William T. Slater, a senior vice-president, denied that they had used the $3.2-billion figure Mr. Dingell cited. Mr. Slater said the companies had estimated that if they were required to begin paying all future pension benefits to women and men on a "unisex" basis as of a particular date, such a plan would result in "a redistribution of income in amounts up to $2-billion, based on life expectancies today and past assets and accumulations."

But T.I.A.A. and C.R.E.F. read the Dingell bill as requiring payment of some equalized benefits "retroactively," he said, which could be much more costly.

A subcommittee of the Energy and Commerce Committee held two days of hearings last week on Mr. Dingell's bill, HR 100, which would bar discrimination in insurance on the basis of race, color, religion, sex, or national origin.

Although President Reagan said in his

Continued on Page 26, Column 1

Pensions

Continued from Page 21

State of the Union address in January that he would introduce a bill to eliminate inequities that women face in pension benefits, Mr. Dingell's bill would also cover bias in health, automobile, and life insurance.

T. Timothy Ryan, Jr., Solicitor of Labor, testified about the recent Labor Department study on pension benefits, adding that the Administration would have to look at the other types of insurance in more detail before it could take a position on legislation to outlaw inequities in them.

His testimony emphasized that while women receive lower monthly pension benefits when they choose the "single-life annuity" option, under which they receive monthly payments after they retire, men now receive lower benefits than women under some other options.

'Joint-Survivor Option'

If men choose a "joint-survivor and annuity option," under which, should the men die, their wives continue to receive monthly payments, they receive lower monthly benefits than women receive if they choose the joint option, said Diane E. Berkley, special assistant to Mr. Ryan.

"The man's spouse is likely to outlive him, so the payments he receives will have to be reduced to fund the benefits his spouse will receive later," she said, while women choosing the joint-survivor option are generally expected to live longer than their husbands, so the payments wouldn't extend after they die.

About 30 per cent of male retirees in the private sector select the joint option, she said.

Clarence Thomas, chairman of the Equal Employment Opportunity Commission, testified that HR 100 appeared to be consistent with Title VII of the Civil Rights Act of 1964, which bars employment discrimination. But, he said, "this consistency alone may not be sufficient to justify the mandatory across-the-board equalization which this bill requires. This mandatory equalization is far different from the flexible remedies available under Title VII."

A number of spokesmen for the insurance industry who testified at the hearings emphasized that women now often pay less than men for some types of life insurance and for auto insurance.

Increases and Decreases

But, said Mary Gray, president of the Women's Equity Action League and a mathematics professor at American University, if discrimination on the basis of sex were eliminated in calculating the premiums and benefits of insurance, "while some women would pay more for auto and life insurance, women would in general pay less for pensions."

"The amount of money involved in pension premiums is, for most people, far more than that involved in auto and life insurance. In my own case, the ratio is nearly 10 to 1," she said.

"It is also true that some men would benefit from nondiscriminatory practices with respect to pensions. Under unisex plans, the benefit to a male annuitant under a joint-survivor option would be greater than under sex-segregated plans. However, this is also an advantage to the female spouse of an annuitant."

Further, she said, "we oppose discrimination against men as well as against women."

FACT-FILE

Median Salaries of Administrators, 1982-83

	All institutions	1-year change	Public institutions	Private institutions	All universities	4-year colleges	2-year colleges
Chief executive of a system	$66,725	+ 6.4%	$65,950	$72,000	$77,252	$69,000	$56,834
Chief executive of a single institution	55,624	+ 7.5%	55,693	55,400	67,760	54,000	50,000
Executive vice-president	49,000	+12.6%	50,000	45,510	56,000	41,000	46,066
Chief academic officer	44,136	+ 7.4%	47,000	40,000	56,123	40,680	40,000
Chief budgeting officer	35,210	+ 6.2%	35,492	33,400	38,296	30,751	33,177
Chief business officer	41,712	+ 7.0%	43,500	38,500	52,176	38,135	37,433
Chief development officer	37,508	+ 7.2%	39,234	36,000	44,863	34,691	30,320
Chief development and public-relations officer	42,000	+17.3%	41,262	42,000	48,000	36,200	34,629
Chief health-professions officer	53,920	+12.4%	52,545	60,500	78,700	29,925	32,100
Chief personnel and human-resources officer	31,500	+ 6.1%	33,460	27,500	35,040	25,050	33,411
Chief physical-plant officer	32,000	+14.3%	34,017	28,250	38,097	28,000	29,713
Chief planning officer	38,580	+ 5.5%	40,140	32,760	44,600	33,296	37,248
Chief planning and budget officer	45,600	+ 9.4%	45,600	45,800	50,350	34,790	38,000
Chief public-relations officer	27,666	+ 3.6%	32,000	24,250	38,300	23,000	26,005
Chief student-affairs officer	36,750	+ 7.0%	40,000	31,000	46,200	31,710	36,000
Administrator, grants and contracts	33,500	+11.4%	34,254	28,355	37,331	24,782	28,400
Administrator, hospital medical center	64,950	+ 5.6%	63,000	80,000	64,963	—	—
Bursar	22,900	+ 3.6%	25,168	20,809	27,000	18,800	22,000
Chaplain	20,575	—	—	20,000	25,534	18,150	16,872
Comptroller	33,000	+10.4%	34,857	30,100	38,688	28,000	29,746
Registrar	27,500	+ 8.0%	31,000	23,165	32,339	23,390	28,000
Director, admissions	28,999	+ 6.3%	30,197	27,500	33,486	27,500	27,308
Director, admissions and financial aid	31,152	+ 3.8%	28,902	33,100	39,132	31,152	27,042
Director, affirmative action, equal employment	30,632	+ 7.1%	30,653	30,500	31,769	27,295	29,150
Director, alumni affairs	23,276	+ 6.2%	25,560	21,000	27,200	20,157	15,688
Director, athletics	31,710	+ 2.6%	34,750	27,950	39,180	27,744	29,175
Director, athletics, men	29,125	− 9.9%	34,121	24,550	34,000	24,550	22,700
Director, athletics, women	23,268	− 8.7%	27,100	19,300	26,747	18,117	22,350
Director, auxiliary services	31,779	+ 5.9%	33,228	29,500	36,958	26,100	26,500
Director, bookstore	16,740	+ 3.3%	21,555	15,500	26,400	15,000	17,500
Director, campus recreation and intramurals	22,260	+ 2.8%	23,517	19,200	24,000	18,500	24,274
Director, campus security	23,764	+ 9.3%	26,000	20,196	28,000	19,642	21,733
Director, community services	29,092	+ 2.4%	30,365	22,000	29,903	23,000	30,738
Director, computer center	32,427	+ 8.1%	34,740	28,250	40,100	28,000	30,313
Director, development and alumni affairs	34,419	+ 7.4%	35,456	30,000	38,506	28,350	26,203
Director, educational-media services	24,600	+ 3.2%	27,328	16,950	29,686	19,464	25,099
Director, food services	26,750	+11.1%	28,091	25,500	31,180	24,400	19,962
Director, foreign students	24,515	+ 2.1%	25,570	22,500	24,798	23,241	20,423
Director, housing and food services	38,000	—	38,000	32,700	39,654	32,700	—
Director, information office	25,629	+ 9.5%	26,520	23,345	30,372	21,570	23,360
Director, information systems	35,800	+ 3.1%	36,700	33,300	37,800	27,200	34,478
Director, institutional research	31,805	+ 7.1%	33,000	27,000	35,000	27,006	29,945
Director, internal audit	30,440	+ 7.3%	30,779	28,600	32,155	22,400	28,789
Director, international-studies education	32,540	+ 5.0%	33,820	26,000	34,400	25,121	32,849
Director, learning-resources center	28,185	− 0.8%	30,439	20,568	31,805	21,800	30,202
Director, legal services	43,000	+ 4.9%	42,420	48,400	44,500	41,064	34,821
Director, library services	30,370	+ 6.8%	34,469	25,641	40,020	26,000	27,416
Director, news bureau	22,260	+ 5.0%	24,728	19,425	24,778	18,344	21,195
Director, personnel and affirmative action	28,836	+12.9%	28,836	27,901	33,928	23,326	26,160
Director, publications	24,012	+ 4.4%	26,770	21,350	26,719	20,550	22,023
Director, purchasing	25,700	+ 7.1%	27,224	23,000	29,640	21,379	25,008
Director, risk management and insurance	30,444	+10.3%	30,240	30,629	33,400	—	25,529
Director, special and deferred gifts	29,282	+ 6.9%	28,827	29,400	30,800	26,739	28,569
Director, student counseling	28,200	+ 4.5%	30,499	23,000	31,320	22,356	29,413
Director, student financial aid	25,100	+ 7.7%	27,800	21,200	29,892	21,492	25,338
Director, student health services							
Physician	48,530	+ 4.0%	51,135	38,000	53,000	33,220	31,928
Nurse	16,640	− 4.5%	20,719	14,300	19,968	14,002	19,656
Director, student housing	22,470	+ 7.3%	26,747	18,500	27,500	18,500	17,430
Director, student placement	24,274	+ 7.4%	27,307	20,950	27,918	21,137	24,064
Director, student union	26,200	+ 9.2%	28,830	20,100	29,107	20,664	24,024
Dean, architecture	51,520	+ 7.0%	51,350	55,000	52,470	32,155	—
Dean, agriculture	48,072	+ 6.8%	48,859	—	54,427	36,247	31,306
Dean, arts and letters	40,000	+ 2.6%	41,600	38,678	48,072	30,480	33,000
Dean, arts and sciences	46,500	+ 9.8%	46,500	46,119	51,000	44,300	33,819
Dean, business	43,337	+ 8.8%	43,600	42,900	51,400	36,863	33,686
Dean, communications	35,925	+ 4.1%	34,723	41,000	47,000	25,795	32,249
Dean, continuing education	35,037	+ 3.6%	36,834	30,000	41,070	30,000	33,189
Dean, dentistry	70,000	+ 8.2%	68,500	73,500	71,000	—	31,075
Dean, education	44,646	+ 5.7%	45,799	34,600	48,000	36,000	31,567
Dean, engineering	54,054	+11.0%	52,041	59,040	58,936	40,125	34,212
Dean, extension	41,000	+11.7%	41,000	39,000	47,700	29,601	33,571
Dean, fine arts	41,920	+ 7.9%	43,977	30,419	46,486	28,547	35,977
Dean, graduate programs	45,860	+ 6.8%	47,160	39,000	48,000	36,210	—
Dean, health-related professions	38,200	+ 3.2%	38,420	35,500	48,596	31,050	34,793
Dean, home economics	45,516	+13.4%	46,700	23,303	49,560	25,750	—
Dean, humanities	34,200	+ 3.0%	35,896	24,109	45,500	26,223	33,225
Dean, law	67,787	+ 9.7%	64,835	69,875	68,200	62,000	—
Dean, library and information sciences	43,500	+12.7%	43,500	43,500	46,200	39,000	32,877
Dean, mathematics	33,608	+ 6.7%	35,300	24,046	37,699	24,046	34,600
Dean, medicine	86,700	+ 6.6%	83,968	113,000	86,700	—	—
Dean, music	38,000	+ 5.3%	42,165	33,900	42,000	27,265	—
Dean, nursing	39,000	+ 6.5%	40,020	36,100	47,900	33,000	31,250
Dean, pharmacy	56,460	+ 6.1%	56,460	56,160	56,650	—	—
Dean, sciences	35,730	− 0.8%	38,650	26,520	48,072	29,000	32,729
Dean, social sciences	33,085	+ 0.7%	35,000	25,066	43,250	26,853	33,698
Dean, social work	50,200	+ 9.5%	50,400	46,000	53,420	32,213	33,698
Dean, special programs	32,556	+10.8%	33,018	29,550	37,400	28,000	30,535
Dean, undergraduate programs	41,000	+ 4.6%	42,000	40,000	47,000	36,720	33,122
Dean, vocational education	37,576	+ 6.6%	37,745	22,700	44,500	35,371	36,686

— No data

Note: Data are intended "only to obtain a broad overview"

SOURCE: COLLEGE AND UNIVERSITY PERSONNEL ASSOCIATION

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News Summary

Articles on inside pages

The president of Auburn University, H. Hanly Funderburk, Jr., has resigned following a yearlong campaign against him by the faculty. Story on Page 3.

The strange practices of the "Moonies," the Hare Krishnas, and other cults raise troubling questions concerning religious liberty and intellectual freedom. Story on Page 5.

A federal law setting 70 as the minimum mandatory retirement age applies to employees of state and local governments. Story on Page 11.

New rules proposed by the Office of Management and Budget regarding lobbying by nonprofit organizations will be substantially revised following a barrage of public criticism. Story on Page 11.

A federal judge has ruled that the National Collegiate Athletic Association did not violate antitrust laws in setting up women's championships. Story on Page 17.

Many publishers still offer discounts to academics, although they no longer actively advertise the practice. Story on Page 23.

Assistants to the chief executives of university systems are the best-paid "second line" administrators in higher education. Story on Page 23.

Virtue has become a meaningless concept in today's society, says Alasdair MacIntyre, a philosopher and the author of *After Virtue*. Story on Page 25.

A Soviet dissident who charged that Moscow State University discriminated against Jewish students has been sentenced to seven years in prison. Story on Page 21.

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Governors Warned About Weaknesses of Colleges in High-Technology Areas

By JACK MAGARRELL

WASHINGTON

Just when states are looking to higher education to foster the development of high-technology industry, colleges and universities are showing signs of weakness, the country's governors were told last week.

"States should be strengthening their colleges and universities for the challenges and needs of a new technological age," said Gov. James B. Hunt, Jr., of North Carolina, chairman of the National Governors' Association's committee on technological innovation.

"Unfortunately," he said at the governors' winter meeting here last week, "there is evidence of declining strength . . . and a lack of vigor in our postsecondary institutions."

Governor Hunt's committee cited surveys indicating that 9 per cent of the engineering faculty positions in the U.S. were vacant, that nearly half the engineering schools had reduced their course offerings, and that a third had reduced their research efforts.

Professors Lured Away

The number of engineers graduating with doctoral degrees has been shrinking in recent years, industry has lured away some senior faculty members, and a third of the junior faculty members are from other countries, said the committee in a preliminary report of its studies.

Similar problems exist in computer-science departments, the report added.

It said faculty members in science and engineering departments, especial-

Continued on Page 8, Column 1

"There is evidence of declining strength and a lack of vigor in our postsecondary institutions."

–North Carolina Gov. James B. Hunt, Jr.

House Approves $425-Million for Science

Funds to aid education, improvement of teaching

By KIM McDONALD

WASHINGTON

The House of Representatives voted 348 to 54 last week to authorize $425-million for new science-education programs in fiscal 1984, about $350-million more than President Reagan requested.

Supporters said the bill, HR 1310, would help alleviate shortages of trained teachers of science and mathematics that they said had reached crisis proportions.

"It will beef up our national defense without more weapons," said Rep. Carl D. Perkins, Democrat of Kentucky and chairman of the House Education and Labor Committee. He compared the measure to the National Defense Education Act, which Congress passed in 1958 to boost science education after the Soviet Union launched Sputnik 1.

$295-Million to Education Dept.

Under the bill passed last week, which Mr. Perkins co-sponsored with Rep. Don Fuqua, Democrat of Florida and chairman of the House Science and Technology Committee, the Education Department would receive $295-million in fiscal 1984 to improve precollege instruction in science and mathematics and in foreign languages "critical" to the country's scientific efforts.

The remaining $130-million would go to the National Science Foundation for a variety of activities, including programs to help colleges and universities retain members of their engineering faculties, improve their science instruction, and replace obsolete research equipment.

Money for the foundation's programs would be authorized for five years, while funds for the programs managed by the Education Department would be authorized for two or three years.

The Senate has not yet drafted a science-education bill. A panel of the Senate Labor and Human Resources Committee will begin hearings this week on science-education legislation introduced by Sen. Clai-

Continued on Page 15, Column 1

Modifications of New NCAA Rules Weighed by College Presidents

One proposal: bar freshmen from football and basketball

By N. SCOTT VANCE

WASHINGTON

The committee of college presidents that drafted the recently adopted rule on academic requirements for athletes says it is willing to consider modifying them. It will meet this spring with black-college presidents to determine how to do so.

According to members of the presidents' committee and black leaders who will take part, the meeting could lead to a proposal to bar freshmen from college athletic competition, at least in basketball and football.

The 37-member presidents' committee, sponsored by the American Council on Education, held its fourth meeting here late last month to decide where it "will go from here," said Robert Aaron, a spokesman for the A.C.E.

The meeting was the panel's first since the National Collegiate Athletic Association adopted the new rule on academic requirements in January. The panel, which proposed the requirements and was the driving force behind their adoption, has been criticized ever since by black-college presidents and others because of what they perceive to be the rule's discriminatory impact on blacks.

The rule, which is scheduled to take effect in 1986, will require students to have earned a minimum standardized-test score and a minimum grade average in a specified curriculum to participate in sports in their freshman year. The rule applies only to the 277 institutions in Division I of the N.C.A.A. The inclusion of minimum test

Continued on Page 19, Column 1

Championships Saved by Women Skiers

A move to include women in the National Collegiate Athletic Association's skiing championships, to be held this week, is likely to save the men's event from being abolished. At right, a University of Vermont coach encourages one of his skiers in the recent Eastern championships.

For details, see Page 18.

JEAN GWALTNEY

'In' Box

Do applicants for college and university jobs falsify their credentials? And, if they do, what are the chances that someone will find out?

In private industry, a recent study found, such fraud could easily go undetected because employers often don't check applicants' backgrounds.

Walter M. Vernon, a professor of psychology at Illinois State University, found in a survey that only 10 of 69 Illinois businesses required applicants to submit college transcripts. More than one-third said they did not ask for references, and only 19 said they got in touch with all the references listed. Only 5 said they called an applicant's previous supervisor.

Mr. Vernon, a former personnel official in private industry, says he doesn't think that fraud is as likely to go undetected in academe because of its greater emphasis on credentials.

But Richard D. Howe, director of equal-opportunity programs at Appalachian State University, says universities have been "lackadaisical" in investigating applicants, particularly for faculty positions.

Appalachian State, for one, asks applicants to provide official college transcripts for all positions that require academic credentials. The practice began several years ago, Mr. Howe says, after officials discovered that "two or three" faculty members had submitted altered copies of their transcripts.

Colleges can be choosier these days, he says, and there's no need for them to take on any "bad apples."

■

In the debate between publishers and educators over classroom use of copyrighted works, some people on both sides blame the photocopier. And, they suggest, the problem can't be eliminated until technology provides a way to curb unauthorized use of copying machines by faculty members, students, and others.

Such developments may not be far off. General Meters Corporation, a small company in Beverly Hills, Cal., is selling an unusual computer system to monitor copying activities.

Called the Copier Accountant, the system enables faculty members and students to use special "credit" or "debit" cards that record the amount of copying they do, says Leon S. Gottlieb, president of General Meters. The computer charges faculty members' departments for copying costs, he says, while students pay in advance for cards that allow a specified amount of copying.

Mr. Gottlieb says the system will discourage people from copying documents for their personal use "when they realize that somebody is watching them." He says it could reduce copying on campus equipment up to 30 per cent.

Several universities probably will install the system soon, he adds.

So far the machine can be used only to record how much copying is done rather than who is copying what. Next year, however, is 1984.

For details about the Copier Accountant, write to Mr. Gottlieb at 433 North Camden Drive, Suite 1200, Beverly Hills, Cal. 90210, or call (213) 274-2617.

Personal & Professional

Book Publishers Still Offer Discounts to Scholars but Publicize Them Less

Economic considerations over the past decade, including the apparent failure of some professors to pay their bills promptly, have led book publishers to stop actively promoting discounts for members of academe.

But discounts, even for books unrelated to a scholar's professional activities, still exist. So do opportunities to obtain complimentary copies of books used in the classroom—which many publishers continue to mail out free, often without being asked. For discounts, though, the initiative now seems to rest more with the scholar than in the past.

Those are the essential findings in a series of informal interviews with publishing officials in recent days. They still value the "good will"—and future sales—that can come from giving special consideration to college and university faculty members, but most of them no longer make a point of advertising such favors.

Getting Payments a 'Nightmare'

The main reason, says David P. Amerman, a vice-president at Prentice-Hall, is that getting faculty members to pay for books ordered directly from publishers can be a "nightmare."

"Nobody's trying to build that kind of market" among faculty members, says Mr. Amerman, a former president of Prentice-Hall's college division. "We'd just as soon have them deal with the college bookstore."

At most campus bookstores, however, discounts for faculty members were discontinued some years ago after students objected that they were being excluded and, bookstore officials note, as faculty salaries increased.

Nevertheless, publishers still have liberal policies for providing complimentary "examination" copies to faculty members who request them—despite complaints that the privilege is widely abused. One assumption is that such policies lead to enough additional sales to outweigh the financial drawbacks.

Publishers continue to honor requests for examination copies because they "don't want to risk offending professors and losing their orders," says Charles A. Thodt, manager of education and meetings for the National Association of College Stores.

At Bantam Books, Doris Bass, director of school and college sales, says she considers the cost of providing examination copies part of her advertising budget, and faculty members can get them simply by writing for them. Publishers apparently do not bother to verify the authenticity of an order as long as it comes on campus stationery.

"We don't require proof of anything," Ms. Bass says.

However, faculty members seeking discounts on books for their personal libraries will find that policies differ significantly from publisher to publisher.

At Holt, Rinehart & Winston, "anyone who works for a school, library, or college" can obtain a 35-per-cent discount on the company's trade books, according to Dagmar Greve, director of school and library programs.

Even a book that isn't likely to be used in the classroom, such as *The Complete Job Search Handbook* by Howard Figler, is eligible for the discount. Orders must be written on campus stationery, and scholars should expect books to be shipped to their institutions, not their homes.

Most Discounts Below 35 Pct.

A 35-per-cent saving is not typical, however. Most discounts range from 10 per cent to 20 per cent, with many publishers refusing to pay for postage on books ordered directly from their warehouses.

That practice may make it worthwhile for faculty members to shop at bookstores, instead.

But in some cases, notes Kent Oswald, an administrative assistant at American University Press Services, "courtesy" discounts of 40 per cent or more may be available, especially from companies that regularly publish a faculty member's own works.

Since discount policies may vary within publishing companies, it's wise to check with the divisions handling particular books. At Harper & Row, for instance, the college division gives professors 10 per cent on any college text they order.

But at Basic Books, a Harper & Row subsidiary, 10-per-cent discounts are limit-

Continued on Following Page

Presidential Assistants Tops in '2nd Line' Pay

By ROBERT L. JACOBSON

WASHINGTON

Assistants to the chief executives of college and university systems are the best-paid "second line" administrators in higher education, the College and University Personnel Association has found in its annual compensation survey. With a median salary of $36,000, they are earning more than the median salaries reported for officials in 38 other second-line positions this academic year.

The assistants' salary level also puts them ahead of administrators in about 50 categories of "first line" campus positions. For example, chief campus budget officers, public-relations officers, and deans in several disciplines were all found to have median salaries below $36,000 this year. Assistants to the presidents of individual campuses were found to have median salaries of $30,632.

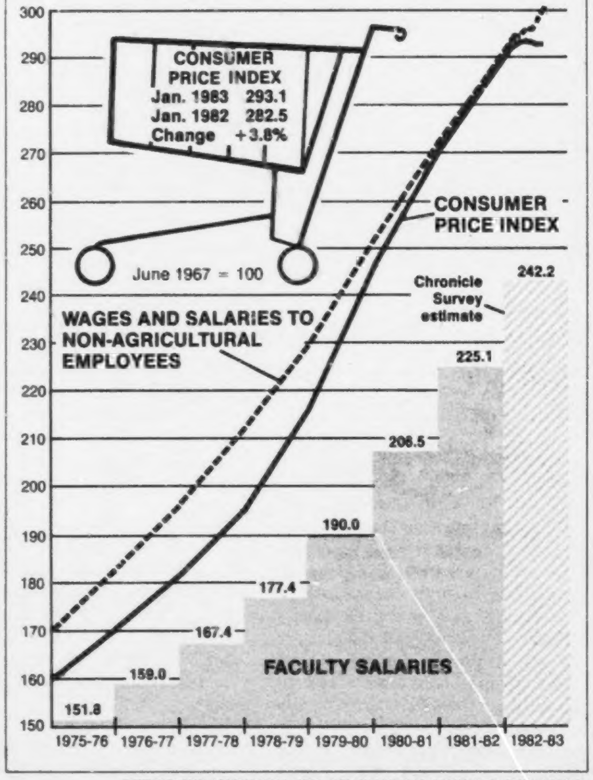
A table of median salaries for second-line administrative positions appears on Page 24 of this issue. For comparable data on salaries of first-line administrators, see the March 2 issue of *The Chronicle*.

Second-line administrative positions are generally "administrative support" jobs, noted Stephen S. Miller, executive director of the personnel association. The survey included them for the first time this year at the request of the Interassociation Management Related Group, an informal consortium of administrative organizations in higher education.

In some cases, Mr. Miller said, the decision to designate posi-

Continued on Following Page

Faculty Pay and the Cost of Living



SOURCES: DEPARTMENT OF LABOR, DEPARTMENT OF COMMERCE, JOHN MINTER ASSOCIATES, AND AMERICAN ASSOCIATION OF UNIVERSITY PROFESSORS

FACT-FILE

Median Salaries for Administrators in 'Secondary' Positions, 1982-83

	All institutions	Public institutions	Private institutions	All universities	4-year colleges	2-year colleges
Assistant to president, system	$36,000	$36,684	$30,000	$38,000	—	$27,775
Assistant to president, institution	30,632	33,385	26,244	36,300	$27,000	29,256
Director, accounting	26,953	29,196	22,650	31,000	20,544	27,329
Director, annual giving	25,000	27,708	24,120	28,300	22,000	20,000
Director, computer center						
Academic	30,300	32,121	29,000	34,400	24,720	23,474
Administrative	29,900	32,122	27,000	35,000	24,602	27,139
Director, corporate and foundation relations	27,394	28,200	27,000	31,000	24,085	26,622
Director, estate planning	30,084	32,796	29,660	34,000	25,500	—
Director, medical-center public relations	30,184	28,820	37,950	30,808	—	—
Director, sports information	19,250	21,500	16,400	21,100	14,568	14,300
Director, student activities	23,000	26,137	18,000	27,428	18,150	24,719
Manager, benefits	21,820	21,925	21,400	22,212	20,140	21,450
Manager, employee relations	28,397	28,397	26,600	28,955	15,000	27,000
Manager, employment	22,584	23,280	20,100	23,088	16,200	24,661
Manager, payroll	20,718	22,464	17,440	23,285	16,100	19,118
Manager, personnel-information	21,306	20,304	26,500	24,000	19,249	19,148
Manager, printing service	21,000	21,828	18,400	23,004	16,850	21,590
Manager, training and development	26,111	25,681	30,000	25,596	—	28,000
Manager, wage and salary	24,748	24,703	25,004	25,000	20,500	25,000
Associate director, admissions	22,416	25,351	20,400	25,536	20,000	20,700
Associate director, food services	22,256	23,472	20,000	25,400	18,000	15,366
Associate director, personnel	25,600	27,000	24,500	28,667	19,521	25,740
Associate director, physical plant and facilities management	26,940	29,130	22,750	31,385	21,500	25,705
Associate director, student housing	20,276	23,636	16,224	22,307	15,147	—
Associate registrar	23,250	25,450	18,644	25,893	18,020	23,000
Assistant director, admissions	18,000	20,518	15,950	19,591	15,900	17,605
Assistant director, student union	19,575	21,000	16,350	20,850	14,929	15,592
Assistant registrar	18,065	20,172	15,600	20,068	15,195	17,300
Admissions counselor	14,388	16,970	13,000	15,750	13,100	17,663
Financial-aid counselor	16,321	17,850	14,750	16,727	15,100	18,500
Placement counselor	17,951	19,425	16,500	18,000	16,900	19,635
Administrative dietitian	19,843	19,150	20,294	19,500	18,150	—
Coordinator, resource development	21,600	26,000	19,600	24,100	18,200	31,300
Specialist, grants and contracts	22,800	23,719	21,560	23,604	18,280	23,328
Superintendent, buildings & grounds	23,745	24,666	22,000	26,784	21,029	22,718
Union business manager	20,295	22,000	15,300	21,700	17,128	—
Housing officers						
Administrative operations	20,448	22,038	17,500	21,213	15,700	—
Family housing	19,884	19,884	19,000	20,000	—	—
Residence life	17,390	20,055	13,200	20,148	12,900	12,864

— No data

Note: Data are intended "only to obtain a broad overview."

SOURCE: COLLEGE AND UNIVERSITY PERSONNEL ASSOCIATION

Leaders in '2nd-Line' Salaries *Continued from Preceding Page*

tions as first line or second line was somewhat arbitrary and might be changed next year. At that time, the personnel association plans to begin reporting year-to-year percentage changes in salaries for secondary positions, as it already does for primary positions.

Its main report this year showed that median salaries for 94 primary positions had risen 6.4 per cent since 1981-82.

Besides presidential assistants, the survey showed, highly paid second-line administrators include directors of academic computer-center operations ($30,300), public-relations directors at university medical centers ($30,184), and directors of estate planning ($30,084).

Mr. Miller said a finding that median salaries of secondary administrators exceeded those for some first-line positions could reflect variations in data submitted by colleges and universities. In all, 1,366 institutions provided "usable data," a report of the survey noted, but Mr. Miller said not all institutions had reported salaries for all positions.

Copies of the report, *1982-83 Administrative Compensation Survey Supplement*, are available from the College and University Personnel Association, 11 Dupont Circle, N.W., Suite 120, Washington 20036. The price is $10 for association members, $25 for nonmembers participating in the survey, and $50 for others.

Book Publishers' Discounts *Continued from Preceding Page*

ed to books in the faculty member's own discipline.

Among university presses, a policy of offering academic discounts is fairly common. Some of the presses, however, restrict discounts to their universities' own faculty members.

"We don't want to undermine the efforts of bookstores and wholesalers," says Gary Lawton, sales manager at the Harvard University Press.

Likewise, publishers of mainly scholarly and professional books are unlikely to give academic discounts on professional books since their audience is composed largely of faculty members.

"We might as well just cut our prices by 10 per cent," says Nancy Greenwood, direct-mail manager of the MIT Press and former manager of its textbook sales and exhibits.

To simplify the process of ordering books at a discount, some faculty members may wish to try an approach used by Patricia Gardner, an associate professor of English at Utah State University. She simply deducts what she thinks is an appropriate "professional" discount and sends in her payment in advance.

Never Asked for Full Price

Ms. Gardner says no publisher has ever asked her to pay the full price of a book.

In addition, academic convention-goers often get excellent buys on books sold at publishers' exhibits.

The standard discount for books on display at academic meetings is 20 per cent, says Mr. Oswald. If you use order forms distributed at display booths—or mention having attended a particular meeting—publishers usually extend the discount for 10 days to two months after the convention.

Many faculty members also have found that, if they wait until the last day of a convention, they can get discounts of 50 per cent or more because publishers may wish to avoid the cost of shipping books back to their warehouses.

(For a comprehensive list of publishers' addresses and phone numbers, consult *Literary Marketplace*, which is available at most libraries.)

—STACY E. PALMER

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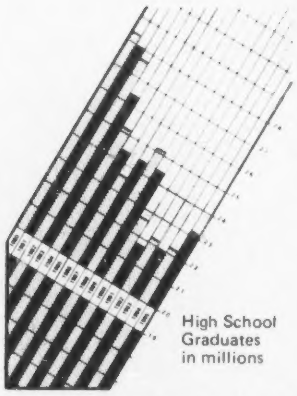

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News Summary

Articles on inside pages

Once again the National Institute of Education is the center of a controversy, this one involving its advisory council. Story on Page 9.

Researchers who use children in their experiments must now obtain consent from them as well as their parents, under new federal rules. Story on Page 9.

A Senate committee has approved a proposal to add $100-million to the College Work-Study program in academic 1983-84. Story on Page 9.

College ice hockey is doing well, many officials say, despite a recent decision by the Univerity of Notre Dame to drop the expensive sport. Story on Page 15.

Most professors supplemented their incomes with extra earnings in 1981-82, according to the latest Chronicle Survey. Story on Page 21.

The photocopying of copyrighted works appears to have decreased following recent efforts to curb the practice. Story on Page 21.

Lord Byron has been the subject of nearly 40 years of study for Leslie Marchand, who has edited a collection of the Romantic poet's letters and journals. Story on Page 25.

Officials in Poland are renewing their attacks on scholars there, in an effort to divide the intellectuals from the workers. Story on Page 19.

Yugoslav educators are angered by the Greek government's decision to withdraw official recognition of degrees from the University of Skopje. Story on Page 19.

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Court Delays Enforcement of Draft Law

Denial of student aid to nonregistrants is issue

By JANET HOOK

WASHINGTON

A federal judge last week granted a temporary injunction blocking enforcement of a new law that would deny federal financial aid to men who refuse to register for the draft.

Issuing the order in a case challenging the constitutionality of the law, Judge Donald D. Alsop of the U.S. District Court for Minnesota said students faced the "threat of irreparable harm" if the law were enforced before the legal dispute over its validity is resolved.

Although Judge Alsop has not yet ruled on the constitutionality of the law itself, he said the arguments challenging it were strong enough to warrant issuing the order temporarily blocking enforcement.

By coincidence, Judge Alsop's order was issued just three days after thousands of college students descended on Washington to urge Congress to repeal the law.

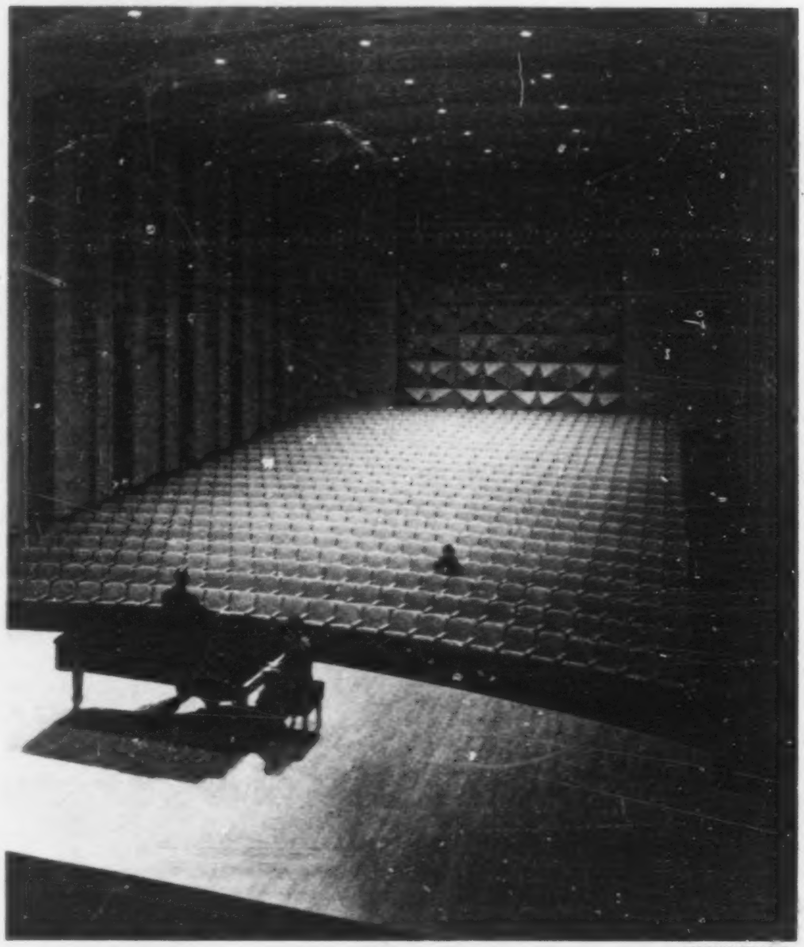
The court action also came as the Education Department was being urged by colleges and members of Congress to rewrite the rules it has proposed for enforcing the law. Judge Alsop's order did not bar federal officials from "promulgating and adopting" those regulations.

Whether his injunction against enforcing the law is legally binding nationwide or only in Minnesota may become a matter of dispute. Justice Department lawyers had not yet read the ruling late last week and refused to comment on whether the government would obey the order nationwide. They also said they had not yet decided whether to appeal Judge Alsop's order.

But lawyers representing the students who are challenging the law were elated by the ruling and contended that it had "nationwide implications."

"The order is clear as far as I am concerned," said Amy Silberberg, a lawyer

Continued on Page 10, Column 1



OBERLIN COLLEGE

Oberlin College, famed for its pioneering admission of women and blacks—as well as for its Conservatory of Music, whose Warner Concert Hall is pictured above—is celebrating its 150th anniversary. See story on Page 6.

Black Leaders Weigh Proposals to Revise Rules for Athletes

WASHINGTON

The National Association for Equal Opportunity in Higher Education this week is sifting through several proposed alternatives to the academic requirements for college athletes recently adopted by the National Collegiate Athletic Association.

Once a substitute proposal is decided upon, it will be recommended to the American Council on Education and the N.C.A.A.

Among the suggested alternatives submitted by several groups and individuals are proposals that would bar freshmen from competing in intercollegiate athletics and would guarantee athletic scholarships for five years. Scholarships are now granted for four-year periods, but are guaranteed for only one year at a time and may be revoked in accordance with institutional policies.

NAFEO, as the group is known, is an association of 114 historically black colleges and universities.

In January the N.C.A.A. adopted new academic requirements for athletes, which have been assailed by black-college presidents and others as racially discriminatory. The new rules, which take effect in 1986, make athletic eligibility for freshmen dependent on their having achieved a minimum standardized-test score. Blacks have scored consistently lower on those tests than whites.

Samuel L. Myers, president of NAFEO,

Continued on Page 18, Column 1

Foundations Urged to Help Colleges Cope with Financial Hard Times

CAMBRIDGE, MASS.

Private foundations must not "take the good health of the nation's colleges and universities for granted while attending to other needs," three officials of the Center for Effective Philanthropy here have warned.

In a letter to the presidents of several hundred foundations, the officials of the two-year-old center called on philanthropic organizations to use their resources to help colleges find ways to cope with financial hard times.

Harold Howe, II, president of the center, said in an interview last week that foundations could not and should not try to replace dwindling state and federal aid to higher education. However, he added, they should support the colleges' own efforts to find solutions to their problems.

Mr. Howe, a former U.S. Commissioner of Education and a former vice-president of the Ford Foundation, was one of three signers of the letter "concerning ways in which foundations may be most

Continued on Page 8, Column 1

'In' Box

"Congratulations! You've been selected to advise freshmen in the college during the coming year. . . ."

Faculty members who get such notices are often as confused as the students they are supposed to help, say the authors of a newly revised handbook, *Advising by Faculty*.

The main shortcoming, they say, is that administrators fail to inform faculty advisers about such basic topics as the college's graduation requirements, financial aid, and student housing. Moreover, faculty members are often thrust into advising roles on short notice and with little guidance. The result is that students seek advice elsewhere, and faculty members who want to develop rapport with students get discouraged.

The authors of the handbook are Howard C. Kramer, director of research and planning in the division of campus life at Cornell University, and Robert E. Gardner, director of admissions in the college of engineering at Cornell. They recommend that faculty advisers clarify what is expected of them by negotiating informal contracts with administrators of advising programs.

The handbook, which outlines a procedure for making such arrangements, also offers advice on communicating with students and how to keep an advising relationship alive. It may be obtained for $7.95 from the National Education Association Order Department, Academic Building, West Haven, Conn. 06516.

■

Another handbook with potentially broad appeal in academe has just been published in a revised edition by the College and University Personnel Association. Called *Essential Personnel Practices*, it contains several dozen brief articles on topics ranging from effective time management and holding meetings to conducting interviews and setting up annuity programs.

Although the handbook is aimed primarily at administrators, much of its contents also could be useful to faculty members and other college employees. It costs $15 for members of the association and $25 for nonmembers. Order from C.U.P.A., 11 Dupont Circle, N.W., Suite 120, Washington 20036.

■

"Hard times"—the expression has become almost a commonplace. Yet its relevance to many areas of American life is often painfully clear—especially to those affected.

Hard times in higher education are the focus of a special issue of *Academe*, the bimonthly bulletin of the American Association of University Professors. The January-February issue, based on material presented at a conference that the association held last spring, includes articles on "What Financial Exigency Means," "Voluntary Alternatives to Forced Termination," and "The President's Perspective."

The bulletin is generally available in college and university libraries. A copy may also be obtained for $4 from *Academe*, One Dupont Circle, N.W., Suite 500, Washington 20036.

Personal & Professional

Outside Earnings Found to Add 25 Pct. to Income of 3 in 4 Faculty Members

By BEVERLY T. WATKINS

More than three-fourths of the faculty members in the United States supplemented their income in academic 1981-82 with extra earnings from professional activities, according to a new Chronicle Survey. On the average, those earnings amounted to about one-quarter of their basic annual salaries.

The top moneymakers, the survey found, were full professors of business and economics at private universities. Their outside earnings averaged $25,232—68.8 per cent of their basic salaries. Their counterparts at public institutions earned an extra $11,521.

In second place, by more than $9,000, were full professors of engineering and computer science at private universities, who made an average of $15,958—or 42.2 per cent of their basic salaries—in extra income last year. Their counterparts at public institutions earned an additional $12,179.

Tables from the survey appear on Pages 22-23.

The vast majority of business and engineering professors of all ranks made some additional money from professional activities in 1981-82, the survey found.

Those professors earned the most extra income in part because of the current shortage of faculty members in their fields, according to William K. Laidlaw, Jr., executive vice-president of the American Assembly of Collegiate Schools of Business, who says that "supply and demand are equally bad in business and engineering."

Mr. Laidlaw says data collected by his organization show that business schools are as short of faculty members as are engineering schools.

"The engineering schools are short 2,000 faculty members," he says. "The business schools are short 2,200."

Business professors also have more opportunities than many other faculty members to earn extra income "because any organization that has to figure out a way to manage itself will need help from a business faculty member," Mr. Laidlaw says.

Exposure to Corporate Leaders

The association official adds:

"Business professors often get exposure to top people in corporations by teaching in executive M.B.A. programs and management-development programs.

"When a senior vice-president in marketing wants a consultant, he will think of the faculty member who taught the marketing-strategy course. He will have seen him in action, know about his research, have read his publications, and know he is capable."

The Chronicle Survey found that, on the average, faculty members at two-year and four-year institutions made an extra $4,759—or 22 per cent of their basic salaries—for performing a variety of professional activities beyond their usual duties last year.

Faculty members at public four-year institutions earned an average $4,802 extra last year, while their counterparts at private institutions reported an additional $4,574. Faculty members at two-year institutions made $4,841, slightly more on the average than their counterparts at four-year institutions.

On the whole, faculty members received more extra income from their own institutions than from outside organizations.

They were paid an average of $3,818 by their institutions last year for taking on additional research and administrative assignments and teaching classes at night or during the summer. They earned an average of $3,114 for providing research, consulting, and other professional services to outside organizations.

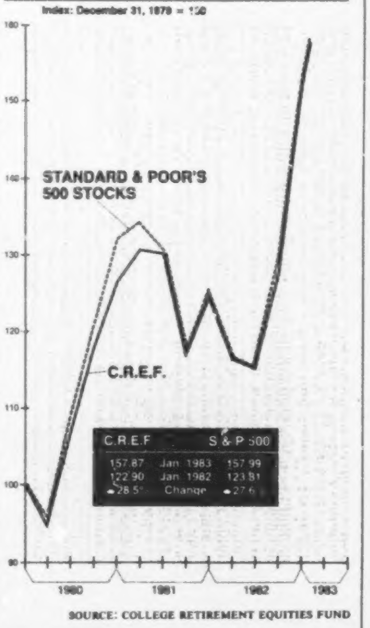
The Chronicle Survey's new report on faculty members' extra earnings is based on information from a national sample of 4,235 faculty members with and without academic rank. Previous surveys included only faculty members with academic rank.

At both public and private institutions, the survey found, full professors in vocational education, which includes agriculture, electronics, health care, and home economics, earned close to $7,000 in extra income.

Full professors of physical education

Continued on Page 24, Column 4

Faculty Pension Funds in the Stock Market



SOURCE: COLLEGE RETIREMENT EQUITIES FUND

Pension funds invested in common stocks by the College Retirement Equities Fund showed a total investment return (changes in market value, plus dividends, less investment expenses) of 28.5 per cent in the 12 months that ended January 31. The value of one "accumulation unit" (share) for January was $57.59.

Photocopying in Academe: Has Lawsuit Curbed It?

By STACY E. PALMER

WASHINGTON

Recent efforts by publishers to curb the photocopying of copyrighted works may already have succeeded on many campuses, even though there have been no major new developments in a lawsuit for copyright infringement that the publishers filed three months ago against New York University and nine of its faculty members.

That is the common view, at least, of officials of the Association of American Publishers and an organization of photocopying outlets. Not everyone on the campuses agrees.

Publishers have "already reaped the benefits" of the suit, said Carol A. Risher, director of copyright at the A.A.P. She pointed to reports that copying shops near college campuses have suffered sharp losses in business since the lawsuit was announced.

Ms. Risher also said her office had been flooded by faculty requests for information about the federal copyright law in the past several months.

Reports of a decline in copying activity were confirmed by officials of the National Association of Quick Printers. At Kinko's Graphics, a national chain with about 170 outlets near college and university campuses, copying has fallen 20 per cent, according to Paul J. Orafalea, chairman of the company.

Campus sources interviewed by *The Chronicle* last week generally provided a different view. Many professors seemed unaware of the publishers' suit, while those familiar with it maintained that they had been complying with copyright regulations all along.

Some Seem More Cautious

Still, there were signs that the lawsuit and related publicity had made some faculty members more cautious about their use of photocopied materials. At Sarah Lawrence College, for instance, Margery B. Franklin, a professor of psychology, said the N.Y.U. case had prompted her to reconsider plans to put together for her introductory courses a "reader" containing copied materials.

Ms. Franklin said she had been aware of copyright restrictions before the suit was filed, but she added that the publishers' action had made the law "living."

So far there has been virtually no judicial action on the N.Y.U. case since the suit was filed, although the parties are known to have discussed the need for litigation.

The university has yet to comment officially on the publishers' charges that some

Continued on Page 24, Column 1

CHRONICLE SURVEY

Faculty Members' Earnings, by Discipline,

Discipline group & type of institution	*Annual income above base salary earned within the institution*					*Annual income above base salary earned outside the institution*					*Total annual income above base salary*				
	Per cent reporting earnings	Average amount of earnings	Per cent of base salary: Average	High (1)	Low (2)	Per cent reporting earnings	Average amount of earnings	Per cent of base salary: Average	High (1)	Low (2)	Per cent reporting earnings	Average amount of earnings	Per cent of base salary: Average	High (1)	Low (2)
ARTS (a)															
Private institutions granting graduate degrees															
Professor	38%	$3,897	6.1%	11.9%	0.4%	63%	$4,785	4.2%	7.3%	1.1%	63%	$6,833	7.8%	15.1%	1.1%
Associate professor	67%	1,728	16.3%	32.1%	0.5%	67%	3,132	17.9%	18.6%	17.4%	67%	$4,395	24.7%	31.6%	17.9%
Assistant professor	75%	1,649	8.5%	11.6%	5.5%	63%	1,824	10.1%	19.3%	0.9%	75%	3,296	16.9%	25.1%	8.8%
All ranks†	59%	2,569	14.4%	25.8%	3.0%	68%	3,927	23.7%	48.0%	3.2%	73%	5,783	23.8%	35.5%	10.4%
Private institutions granting only bachelor's degrees															
Professor	20%	$1,800	11.1%	11.1%	11.1%	20%	$1,000	6.4%	13.9%	—	80%	$1,468	7.8%	14.3%	1.4%
Associate professor	67%	1,325	7.3%	11.4%	3.2%	67%	3,900	22.8%	45.6%	0.1%	100%	4,183	23.9%	42.3%	5.4%
Assistant professor	63%	1,930	14.0%	19.5%	8.4%	63%	2,583	19.1%	30.3%	7.8%	75%	4,192	30.7%	41.1%	20.3%
All ranks†	52%	1,579	10.9%	15.7%	6.1%	52%	2,413	15.9%	30.9%	0.9%	87%	2,634	19.2%	32.6%	5.9%
Public 4-year institutions															
Professor	48%	$2,970	10.3%	14.1%	6.4%	90%	$2,547	10.4%	17.7%	3.1%	100%	$4,091	14.3%	22.4%	6.3%
Associate professor	43%	3,978	16.0%	24.6%	7.4%	43%	2,840	13.6%	24.2%	2.9%	78%	4,579	20.2%	32.8%	7.6%
Assistant professor	56%	2,586	14.0%	21.4%	6.7%	56%	2,860	17.7%	34.7%	0.8%	94%	3,739	20.3%	33.1%	7.4%
All ranks†	50%	2,440	10.6%	16.3%	5.0%	50%	3,234	21.0%	42.0%	0.3%	88%	4,151	22.8%	40.8%	4.8%
Public 2-year institutions															
All ranks†	53%	$3,029	13.8%	21.6%	6.0%	53%	$3,083	17.8%	34.9%	0.7%	75%	$3,418	21.5%	37.4%	5.5%
BUSINESS (b)															
Private institutions granting graduate degrees															
Professor	82%	$8,206	19.0%	26.8%	11.1%	73%	$12,625	45.7%	75.5%	15.9%	91%	$25,232	63.8%	104.3%	23.3%
Associate professor	50%	6,333	22.6%	33.3%	12.0%	50%	5,990	22.2%	40.0%	4.3%	94%	8,674	31.6%	52.0%	11.1%
Assistant professor	93%	5,333	24.3%	33.9%	14.6%	93%	5,600	26.0%	44.4%	7.7%	96%	9,005	41.4%	61.1%	21.6%
All ranks†	75%	6,144	22.8%	32.2%	13.4%	75%	8,563	32.6%	58.2%	7.0%	95%	12,109	43.5%	68.9%	18.2%
Private institutions granting only bachelor's degrees															
Professor	60%	$1,733	6.0%	7.0%	4.9%	60%	$4,667	17.9%	19.7%	16.1%	80%	$4,800	19.9%	24.6%	11.2%
Associate professor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Assistant professor	53%	2,667	14.6%	22.2%	7.0%	53%	6,625	37.3%	74.9%	‡	65%	7,109	39.1%	70.7%	7.5%
All ranks†	57%	2,388	12.7%	20.2%	5.1%	57%	6,371	33.8%	59.8%	7.9%	71%	6,430	33.8%	60.0%	7.6%
Public 4-year institutions															
Professor	68%	$5,568	16.2%	25.3%	7.1%	68%	$5,585	25.4%	49.4%	1.4%	93%	$11,521	31.4%	51.1%	11.7%
Associate professor	72%	5,605	21.1%	28.0%	14.2%	72%	5,440	25.4%	45.7%	5.2%	81%	7,344	33.4%	49.7%	17.0%
Assistant professor	68%	6,074	13.3%	19.7%	6.9%	68%	2,140	12.4%	23.8%	0.9%	82%	3,080	17.1%	27.7%	6.5%
All ranks†	71%	4,597	17.2%	24.9%	9.4%	71%	4,709	22.7%	43.7%	1.8%	85%	7,142	28.4%	45.6%	11.2%
Public 2-year institutions															
All ranks†	69%	$4,157	19.0%	29.5%	8.4%	69%	$4,192	31.3%	63.9%	‡	84%	$8,490	30.4%	50.1%	10.6%
ENGINEERING (c)															
Private institutions granting graduate degrees															
Professor	63%	$10,494	27.3%	35.6%	18.9%	79%	$8,867	26.1%	45.6%	6.6%	89%	$15,958	42.2%	64.4%	20.1%
Associate professor	55%	6,892	25.9%	35.6%	16.1%	73%	7,375	26.2%	38.9%	13.4%	91%	10,060	36.4%	52.0%	20.9%
Assistant professor	100%	4,311	20.2%	29.7%	10.8%	44%	2,600	15.4%	25.0%	5.8%	100%	5,911	27.1%	38.2%	16.0%
All ranks†	64%	7,633	24.6%	33.7%	15.5%	69%	8,014	25.0%	40.9%	9.2%	90%	11,984	36.6%	54.3%	20.9%
Private institutions granting only bachelor's degrees															
Professor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Associate professor	50%	$2,125	11.0%	19.2%	2.8%	50%	$1,250	8.1%	16.4%	‡	100%	$1,763	9.6%	15.8%	3.4%
Assistant professor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
All ranks†	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Public 4-year institutions															
Professor	54%	$8,121	23.1%	32.2%	14.1%	54%	$5,375	21.1%	40.6%	1.7%	76%	$12,179	34.7%	54.8%	14.6%
Associate professor	79%	5,340	17.8%	29.1%	6.6%	79%	4,119	19.5%	34.2%	4.7%	86%	7,624	28.1%	46.6%	9.6%
Assistant professor	33%	5,953	24.2%	31.9%	16.5%	33%	3,457	17.6%	35.1%	0.0%	67%	5,597	24.4%	42.4%	6.4%
All ranks†	58%	6,563	20.7%	31.2%	10.2%	58%	4,673	20.1%	37.6%	2.5%	76%	9,327	30.4%	49.6%	11.2%
Public 2-year institutions															
All ranks†	64%	$4,048	17.2%	25.5%	8.8%	64%	$4,181	20.3%	32.0%	8.5%	83%	$4,842	20.2%	29.8%	10.5%
HUMANITIES (d)															
Private institutions granting graduate degrees															
Professor	69%	$4,011	12.4%	19.0%	5.7%	69%	$1,525	6.4%	18.0%	‡	100%	$3,449	10.5%	17.1%	4.0%
Associate professor	65%	3,038	13.7%	18.4%	9.0%	65%	1,505	8.5%	19.7%	‡	74%	2,531	15.8%	23.3%	8.3%
Assistant professor	55%	1,765	10.6%	15.3%	5.9%	55%	1,146	7.0%	11.7%	2.2%	75%	1,727	13.8%	20.7%	7.1%
All ranks†	57%	2,464	11.4%	16.6%	5.6%	57%	1,926	12.8%	26.3%	‡	79%	2,525	14.9%	24.5%	5.3%
Private institutions granting only bachelor's degrees															
Professor	46%	$1,747	6.3%	11.0%	1.6%	46%	$1,675	6.7%	10.9%	2.6%	54%	$1,341	9.2%	16.0%	2.4%
Associate professor	78%	1,286	6.3%	8.5%	4.1%	78%	833	6.0%	11.9%	—	78%	1,333	8.8%	13.4%	4.2%
Assistant professor	64%	1,531	8.4%	14.4%	2.3%	64%	1,283	8.0%	13.8%	2.2%	91%	1,693	10.7%	19.4%	1.9%
All ranks†	63%	1,636	8.4%	14.1%	2.6%	63%	1,300	7.1%	12.6%	1.7%	74%	1,539	10.7%	18.4%	3.0%
Public 4-year institutions															
Professor	52%	$4,320	15.1%	22.1%	8.8%	52%	$1,950	13.0%	29.7%	‡	78%	$3,764	18.1%	31.1%	5.0%
Associate professor	65%	3,038	13.7%	18.4%	9.0%	65%	1,505	8.5%	19.7%	‡	74%	2,531	15.8%	23.3%	8.3%
Assistant professor	59%	2,385	13.8%	20.3%	7.3%	59%	449	3.9%	6.7%	1.2%	73%	1,670	13.4%	20.4%	6.4%
All ranks†	56%	3,169	8.8%	19.1%	8.0%	56%	1,439	4.6%	8.3%	0.8%	70%	2,553	15.5%	24.8%	6.3%
Public 2-year institutions															
All ranks†	58%	$3,321	15.4%	24.7%	6.1%	58%	$3,171	15.5%	33.8%	‡	69%	$2,866	17.5%	30.0%	5.1%
PHYSICAL EDUCATION (e)															
Private institutions granting graduate degrees															
Professor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Associate professor	33%	$4,725	21.7%	28.8%	13.7%	33%	$2,600	15.8%	28.0%	3.6%	33%	$7,350	33.1%	51.8%	14.4%
Assistant professor	80%	1,704	9.7%	12.1%	7.4%	80%	765	4.2%	7.5%	1.0%	80%	2,182	12.4%	16.0%	8.8%
All ranks†	50%	2,656	13.5%	18.7%	8.3%	50%	2,202	10.0%	17.8%	2.3%	58%	4,097	19.0%	28.7%	9.4%
Private institutions granting only bachelor's degrees															
Professor	50%	$3,100	13.5%	19.5%	7.4%	50%	$2,600	8.2%	15.6%	0.8%	75%	$3,800	14.5%	18.6%	10.3%
Associate professor	57%	1,085	5.7%	6.7%	4.7%	57%	9,400	56.3%	108.1%	4.4%	71%	8,228	27.0%	59.5%	‡
Assistant professor	88%	1,655	11.1%	17.1%	5.2%	88%	1,217	7.8%	14.7%	0.8%	88%	2,177	14.5%	23.1%	5.8%
All ranks†	70%	1,524	9.2%	14.0%	4.3%	70%	3,950	21.8%	46.4%	‡	78%	3,890	16.6%	29.7%	3.5%

Continued on Page 23, Column 1

Continued on Page 23, Column 2

Continued on Page 23, Column 3

— Indicates too few data for reliable estimate.
† Includes faculty members without rank.
‡ Less than 1%.

(a) Includes architecture, cinema, dance, music, and theater.
(b) Includes economics.
(c) Includes computer science.
(d) Includes classics, English, languages, journalism, literature, philosophy, religion, and speech.
(e) Includes coaching and recreation.
(f) Includes mathematics.
(g) Includes education.
(h) Includes agriculture, electronic and engineering technology, health, home economics, nursing, occupational and physical therapy, and textiles.
(1) About one-fifth of the faculty members reported salaries higher than the "high" percentage (mean per cent plus one mean deviation).
(2) About one-fifth of the faculty members reported salaries lower than the "low" percentage (mean per cent minus one mean deviation).

Beyond Their Base Salaries in 1981-82

	Annual income above base salary earned within the institution					*Annual income above base salary earned outside the institution*					*Total annual income above base salary*				
Discipline group & type of institution	**Per cent reporting earnings**	**Average amount of earnings**	**Per cent of base salary Average**	**High (1)**	**Low (2)**	**Per cent reporting earnings**	**Average amount of earnings**	**Per cent of base salary Average**	**High (1)**	**Low (2)**	**Per cent reporting earnings**	**Average amount of earnings**	**Per cent of base salary Average**	**High (1)**	**Low (2)**
PHYSICAL EDUCATION (e)—Continued															
Public 4-year institutions															
Professor	56%	$7,127	25.6%	42.1%	9.2%	56%	$2,286	12.4%	20.3%	4.6%	81%	$7,160	25.4%	40.7%	10.0%
Associate professor	62%	2,795	12.2%	17.0%	7.4%	62%	1,696	7.8%	15.3%	0.3%	76%	3,534	15.8%	24.7%	6.8%
Assistant professor	56%	3,401	17.3%	25.0%	9.6%	56%	1,711	8.8%	17.0%	0.7%	84%	3,320	16.8%	27.6%	6.0%
All ranks†	56%	435	18.4%	28.0%	8.8%	56%	2,073	11.0%	20.7%	1.3%	79%	4,684	19.9%	32.3%	7.6%
Public 2-year institutions															
All ranks†	45%	$4,461	18.4%	30.3%	6.6%	45%	$1,631	9.0%	16.6%	1.3%	62%	$4,248	17.6%	29.7%	5.6%
SCIENCES (f)															
Private institutions granting graduate degrees															
Professor	79%	$5,208	8.5%	13.1%	3.9%	79%	$3,163	13.1%	25.5%	0.8%	73%	$4,344	17.4%	27.9%	7.0%
Associate professor	79%	4,443	17.9%	26.1%	9.7%	79%	4,514	18.8%	32.2%	5.5%	89%	6,622	26.3%	38.2%	14.3%
Assistant professor	79%	3,200	17.0%	28.6%	5.4%	79%	2,300	26.1%	50.4%	1.8%	89%	5,044	27.3%	44.1%	10.4%
All ranks†	77%	4,375	16.6%	25.1%	8.1%	77%	3,455	16.9%	30.4%	3.4%	88%	6,062	23.5%	11.7%	—
Private institutions granting only bachelor's degrees															
Professor	55%	$3,923	14.2%	24.9%	3.4%	55%	$5,975	32.6%	55.6%	9.6%	73%	$5,930	26.9%	44.6%	9.3%
Associate professor	60%	2,300	12.8%	18.4%	7.3%	60%	3,033	18.4%	26.9%	9.8%	80%	2,863	16.5%	22.1%	10.9%
Assistant professor	50%	2,260	13.0%	20.0%	5.8%	50%	2,000	13.0%	21.2%	4.9%	69%	2,553	15.4%	22.2%	8.5%
All ranks†	55%	2,719	13.2%	20.3%	6.1%	55%	3,107	18.3%	31.9%	4.6%	75%	3,547	18.8%	28.2%	9.4%
Public 4-year institutions															
Professor	50%	$4,276	14.0%	20.5%	7.6%	50%	$3,712	16.6%	35.2%	‡	67%	$6,579	21.5%	36.3%	6.8%
Associate professor	69%	3,643	15.2%	22.4%	7.9%	69%	3,512	17.4%	41.5%	‡	85%	4,820	20.3%	34.9%	5.6%
Assistant professor	52%	4,768	23.8%	38.2%	9.4%	52%	3,146	18.2%	34.1%	2.4%	78%	5,208	25.4%	42.2%	8.6%
All ranks†	55%	4,107	16.0%	24.0%	8.0%	55%	3,566	17.4%	37.3%	‡	74%	5,668	21.8%	37.0%	6,6%
Public 2-year institutions															
All ranks†	65%	$4,178	18.4%	28.0%	8.8%	65%	$2,841	15.4%	31.2%	‡	72%	$5,245	23.2%	36.5%	9.8%
SOCIAL SCIENCES (g)															
Private institutions granting graduate degrees															
Professor	58%	$4,785	13.4%	18.9%	7.9%	58%	$4,347	16.2%	33.2%	‡	88%	$5,602	21.4%	36.6%	6.2%
Associate professor	70%	3,257	15.3%	23.4%	7.1%	70%	2,907	17.0%	34.4%	‡	89%	3,820	19.9%	33.0%	6.7%
Assistant professor	71%	3,144	17.4%	26.3%	8.5%	71%	1,878	12.6%	19.1%	6.1%	82%	4,170	23.0%	32.1%	13.9%
All ranks†	65%	3,726	15.9%	23.6%	8.1%	65%	3,413	17.3%	32.8%	1.7%	85%	4,702	23.4%	37.1%	9.6%
Private institutions granting only bachelor's degrees															
Professor	46%	$2,743	10.2%	14.5%	5.9%	46%	$1,057	5.2%	9.6%	0.8%	62%	$1,738	12.2%	19.1%	5.3%
Associate professor	80%	3,852	19.7%	38.0%	1.5%	80%	3,614	20.0%	34.7%	5.3%	93%	4,828	26.9%	52.4%	1.5%
Assistant professor	57%	1,385	8.6%	14.3%	2.9%	57%	4,596	31.2%	59.0%	3.3%	79%	3,793	28.9%	53.1%	4.8%
All ranks†	62%	2,745	14.1%	25.6%	2.6%	62%	3,158	19.3%	36.9%	1.8%	79%	3,257	24.0%	45.9%	2.2%
Public 4-year institutions															
Professor	40%	$5,514	17.4%	25.7%	9.1%	40%	$2,395	10.4%	21.5%	‡	79%	$4,104	16.2%	27.6%	4.9%
Associate professor	81%	3,944	18.7%	28.8%	8.6%	81%	3,575	23.2%	50.7%	‡	94%	5,409	30.1%	53.7%	6.6%
Assistant professor	59%	3,752	18.8%	26.7%	11.0%	59%	1,414	17.8%	14.6%	1.1%	76%	3,061	20.2%	32.3%	8.2%
All ranks†	56%	4,303	18.0%	26.8%	9.2%	56%	2,952	14.7%	30.7%	‡	81%	4,372	22.5%	38.7%	6.4%
Public 2-year institutions															
All ranks†	66%	$3,487	15.1%	23.1%	7.1%	66%	$2,985	17.8%	36.3%	‡	85%	$4,271	21.5%	36.5%	6.6%
VOCATIONAL EDUCATION (h)															
Private institutions granting graduate degrees															
Professor	83%	$3,390	11.3%	17.9%	4.7%	83%	$5,667	16.4%	33.2%	‡	83%	$6,790	21.1%	40.5%	1.8%
Associate professor	67%	2,800	12.5%	18.4%	6.6%	67%	1,263	8.1%	4.8%	4.4%	100%	3,075	13.8%	20.6%	6.9%
Assistant professor	55%	1,701	9.0%	13.3%	4.7%	55%	822	7.3%	13.0%	1.7%	85%	1,655	9.3%	14.3%	4.2%
All ranks†	61%	2,116	9.5%	14.0%	4.3%	61%	1,819	9.5%	17.0%	2.1%	87%	2,579	11.5%	18.9%	4.2%
Private institutions granting only bachelor's degrees															
Professor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Associate professor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Assistant professor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
All ranks†	57%	$1,193	7.6%	10.2%	5.1%	57%	$2,520	15.5%	24.0%	7.0%	71%	$2,215	13.9%	21.4%	6.4%
Public 4-year institutions															
Professor	38%	$4,146	11.9%	20.3%	3.5%	38%	$2,643	23.5%	44.8%	2.3%	63%	$7,638	23.6%	40.6%	6.7%
Associate professor	45%	3,727	14.1%	20.3%	8.0%	45%	2,624	13.0%	24.3%	1.7%	63%	4,420	19.2%	31.5%	6.9%
Assistant professor	37%	2,770	13.5%	20.6%	6.4%	37%	1,970	12.0%	21.8%	2.3%	53%	3,304	16.8%	26.2%	7.4%
All ranks†	39%	3,244	12.9%	19.7%	6.0%	39%	2,490	15.7%	29.3%	2.1%	59%	4,574	19.6%	32.5%	6.7%
Public 2-year institutions															
All ranks†	42%	$4,168	18.2%	33.2%	3.2%	42%	$4,093	25.7%	48.6%	2.9%	63%	$5,343	26.3%	48.9%	3.7%
ALL DISCIPLINES															
All private institutions granting graduate degrees															
All faculty members†	64%	$3,846	15.7%	23.4%	7.9%	54%	$3,855	18.3%	34.2%	2.7%	83%	$5,675	23.7%	32.8%	8.4%
All private institutions granting only bachelor's degrees															
All faculty members†	59%	$2,112	11.2%	18.4%	4.0%	45%	$2,840	16.5%	30.6%	2.5%	76%	$3,024	18.7%	32.7%	4.7%
All public 4-year institutions															
All faculty members†	56%	$3,954	15.0%	23.5%	8.2%	50%	$2,993	14.9%	22.9%	‡	77%	$4,802	21.8%	33.6%	7.1%
All private 4-year institutions															
All faculty members†	62%	$3,299	14.3%	21.9%	6.7%	50%	$3,391	17.5%	32.4%	2.9%	78%	$4,574	21.4%	31.4%	7.0%
All public and private 4-year institutions															
All faculty members†	74%	$3,815	20.3%	33.5%	7.0%	72%	$3,064	20.9%	35.6%	6.3%	77%	$4,736	21.7%	35.5%	7.1%
All public 2-year institutions															
All faculty members†	58%	$3,827	17.0%	27.2%	6.7%	34%	$3,290	19.4%	38.8%	‡	73%	$4,841	22.6%	38.3%	6.9%
All institutions															
All faculty members†	71%	$3,818	20.0%	32.0%	7.0%	64%	$3,114	21.0%	36.0%	5.0%	76%	$4,759	22.0%	36.0%	7.0%

NOTE: Survey data are based on responses of 4,235 faculty members who offered courses from the fall of 1980 through the fall of 1982. To include faculty members newly hired, the sample was drawn from faculty lists that were revised in September, 1982. Data are weighted to represent faculty members at colleges and universities of all types except law and medical schools, proprietary institutions, private two-year colleges, and colleges with fewer than 500 students. Data also are weighted according to discipline. Earnings beyond base salary drawn from within an institution are defined as those received from (or channeled through) the institution during the 1981-82 academic year and summer of 1982. This term includes extension, overloads, administrative supplements, contract research, summer teaching or other summer payments, etc. Earnings beyond base salary earned outside an institution are defined as those from professional work and activities during the 1981-82 academic year and summer of 1982. This includes consulting, paid research, other professional salary or income. Royalties are included. Investment income, rents, and gifts are not included. Technical inquiries about the survey design and sampling techniques should be addressed to John Minter Associates, P.O. Box 107, Boulder, Colo. 80306.

SOURCE: SURVEY FOR THE CHRONICLE BY JOHN MINTER ASSOCIATES

Photocopying in Academe

Continued from Page 21

professors gave their students photocopied "anthologies" of copyrighted materials—without seeking advance permission.

When the lawsuit was announced, publishing officials said they hoped the suit would persuade colleges and universities to take a more active role in enforcing copyright regulations on their campuses. At the time, Townsend Hoopes, president of the Association of American Publishers, said he hoped the suit would "make the academic community more aware that they are violating the law so that they will change their photocopying practices."

The lawsuit hasn't had that effect at many institutions, however. At Georgia State University, for one, the N.Y.U. suit "hasn't seemed to have had any impact on day-to-day operations," said Jerry H. Robbins, associate vice-president.

Shortly after the suit was announced, however, officials at some colleges and universities said they had reviewed their policies on copying or had sent memos to professors reminding them about copyright rules and informing them of the N.Y.U. case. At other campuses, local copyright "experts" were asked to conduct workshops or talk to employees about the limits of photocopying for educational purposes.

Under the "fair use" doctrine of the 1976 Copyright Act, educators are allowed to copy protected works for purposes of scholarship, research, and classroom use. Several broad criteria apply—including the nature of the work, the relative amount copied, and the market implications of the reproduction.

CHRONICLE PHOTO BY JOHN C. PHILLIPS

The rules on photocopying are confusing to many in academe. Above, students use copy machines at George Washington U.

However, because Congress did not explicitly outline the bounds of fair use, its application in specific cases has been left to the courts.

Classroom use can be defined so liberally, says Roderick J. Casper, acting director of libraries at the California Institute of Technology, that it is ofen viewed as flexible and "a fairly easy thing to get around."

Commenting on the N.Y.U. suit, Glen Gordon, professor of political science at the University of Massachusetts at Amherst said, "It's not something people are talking about." But he added that faculty members often found the federal regulations "aggravating" and inhibiting.

Nonetheless, people in academe are likely to abide by the copyright rules, Mr. Gordon said. Noting that many faculty members have their own works published, he said they were especially responsive to others' claims for compensation.

Looking for Guidance

However, the vague nature of fair use has left many faculty members confused about how much unauthorized copying the law allows. Several of them said they hoped the decision in the N.Y.U. case would eliminate that confusion.

"Faculty members across the U.S. want to do the right thing," said Susan Brynteson, director of libraries at the University of Delaware. "They are looking for guidance."

Owners of the shops that do much of the copying on or near college campuses, however, maintained that the problem was not confusion, but fear. They said professors had been overly "frightened" by news reports about the N.Y.U. suit.

Calling the suit a "public-relations scam," Mr. Orafalea of the Kinko's Graphics chain said publishers had been misinforming faculty members about the limits of fair use.

He accused the publishers of exaggerating the limits that Congress had intended to place on the photocopying of protected works.

George Dennison, interim associate academic vice-president at Colorado State University, accused publishers of using "scare tactics." He urged them to stop "intimidating" academics, and to allow faculty members "to get on with the educational process."

Association Plans Publicity

Mr. Orafalea maintained that most of the copying done on college campuses was allowable under federal law. He said the printers' association was about to start a publicity campaign of its own to "reassure" faculty members that they are allowed to copy many kinds of materials.

Seeking to clarify the bounds of fair use, in 1976 a group of publishers and educators developed a set of voluntary guidelines to govern classroom photocopying. Intended to provide "minimum standards," the guidelines say that unauthorized copying must meet requirements for "brevity," "spontaneity," and "cumulative effect."

Some members of academe have called the guidelines too restrictive. Some legal experts, on the other hand, have said they expect the courts to rely on them. Indeed, a federal appeals court in Los Angeles recently cited the guidelines, ruling that a high-school teacher who copied more than 50 per cent of a protected work could not be exempted under the fair-use doctrine.

Most colleges and universities apparently will not change their policies on copying before the N.Y.U. case is resolved. Meanwhile, several campus lawyers said last week that they would continue to encourage faculty members to abide by the minimum standards outlined in the voluntary guidelines.

Some campus officials said increased attention to copyright regulations could be attributed to a greater awareness of the 1976 Copyright Act, which took effect on January 1, 1978, rather than directly to the publishers' suit.

Concern about copyright issues has not been limited to photocopying, noted Albert W. Fields, professor of English at Southwestern Louisiana. He said members of his department were "reluctant" to use a new videotape recorder because they were uncertain of the limitations under the fair-use doctrine.

Campus librarians, meanwhile, have argued that publishers should work with educators to handle problems posed by such new technologies, instead of directing so much attention to the use of photocopied materials, said Ms. Brynteson of the University of Delaware. Most of the copying done in campus libraries falls within the bounds of the law, she said. She added that the law had already achieved an adequate balance between the rights of copyright owners and users of their works.

Outside Earnings

Continued from Page 21

and athletic coaches at public institutions earned similar amounts.

Faculty members in the humanities had the least additional income, according to the survey. Full professors at both public and private institutions earned close to $3,500. The average for all humanities faculty members was about $2,500.

Only information from faculty members reporting extra professional income, including royalties, during the year was included in the calculations of average additional income and average percentage of base salary. "Professional income" does not include investment income, rents, or gifts.

The survey was conducted for *The Chronicle* by John Minter Associates, a higher-education research organization in Boulder, Colo.

THE CHRONICLE ACROSTIC

By ROBERT L. JACOBSON

Directions

In the blanks, write the words defined below. Then transfer each letter to the correspondingly numbered box in the grid at the right. As words take shape in the grid, additional letters may be transferred back to the blanks next to the definitions. When you're finished, the grid will contain a statement relating to higher education. The initial letters of the answers to the definitions will give the name of the author and the source of the statement. The solution will be published next week.

K1	D2		O3	R4	B5		BB6	G7	X8	J9	M10	A11	F12		L13	T14	C15	E16	V17	O18	A19		AA20	W21	R22
X23		M24	J25	A26	K27		F28	E29		I-30	K31	B32		D33	W34	H35		K36	O37	C38	AA39	G40	J41	M42	Q43
V44		C45		D46	A47	P48	M49	C50	L51	U52	AA53		W54	B55	I-56	M57	U58	G59	Y60	Z61	C62	T63	BB64	X65	AA66
	A67	H68	G69	B70	Q71	N72	I-73	U74	M75	W76		X77	Y78	M79	H80	Q81	S82	T83	BB84	D85		P86	R87		R88
B89	W90		I-91	J92	C93	K94	G95		Y96	D97	BB98		R99	W100	A101	B102	X103	O104	Q105	V106	D107	N108		X109	W110
R111		O112	D113		Y114	Z115	M116	B117	C118		AA119	E120		P121	Y122	AA123		W124	X125	Z126	A127	V128	M129	BB130	U131
C132		C133	B134	M135	F136		A137	Z138	K139	R140		E141	C142	I-143	M144	S145	R146	B147	O148		T149	S150		AA151	M152
N153	C154	O155	K156	G157	D158	BB159	H160		I-161	L162	F163		B164	Z165	P166	L167	D168		Q169	C170		BB171	G172	X173	Y174
Z175		E176	M177		N178	P179	L180	S181		A182	D183	H184		M185	Y186	B187	K188	G189		Q190	K191	C192	S193	N194	

Definitions

A. Popular discipline 67 11 26 101 182 127 47 137 19

B. Institute in N.J. (two words) . 32 147 117 102 187 55 164 89 5 70 134

C. Day-care fare (three words) .. 192 50 133 118 93 170 62 15 154 45 38 142 132

D. Left for marine biologists (two words) 2 97 158 46 113 168 85 33 183 107

E. It's right for Wolfe 141 176 16 120 29

F. Small-college locale 136 28 163 12

G. Father Ted 172 95 157 69 40 189 59 7

H. Musical exercise 160 184 68 35 80

I. Expert 91 143 161 56 30 73

J. Draw the line 9 25 92 41

K. Custodian of sorts 1 191 94 27 36 139 188 156 31

L. Faux pas 167 180 13 51 162

M. Psychological victory in the physics department (three words) 24 129 42 144 177 79 57 116 152 135 185 10 49 75

N. What many people do to get into college 194 178 153 72 108

O. Trial heat (two words) 3 155 148 18 104 112 37

P. Where someone's relative might earn a degree? (two words) 86 121 179 166 48

Q. Meteorological subjects 43 81 169 71 190 105

R. Where Floridians may study (three words) 88 146 111 4 140 22 99 87

S. College-entrance requirement 193 82 150 145 181

T. Faculty org. 14 149 63 83

U. Venerable one 131 52 58 74

V. Not working 106 128 17 44

W. Descriptive of Word Q 100 76 124 110 34 21 54 90

X. College-entrance requirement 8 109 23 173 65 125 77 103

Y. Word U is one 96 78 114 174 186 122 60

Z. Cornell community 126 165 175 138 115 61

AA. Profitable subject in Austin (two words) 119 151 20 123 66 53 39

BB. Artistic movement (two words) 130 84 6 171 64 159 98

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News Summary

Articles on inside pages

Northeastern Records is the label of what may be the only university-supported recording company in the country. Story on Page 4.

Television channels now reserved for educational programs may soon be turned over to commercial operators. Story on Page 7.

A Senate committee has voted not to require payment of Social Security taxes on the contributions that many colleges make to pension plans. Story on Page 9.

The executive director of the advisory council of the National Institute of Education has been transferred to the White House staff. Story on Page 9.

The Departments of Education and Labor must continue to adhere to agreed-upon time limits for resolving complaints of discrimination at colleges and universities. Story on Page 11.

Proposals to prohibit freshmen from participating in varsity sports appear to be gaining ground. Story on Page 15.

Sexual harassment is an explosive issue on many campuses today, and officials are drawing up policies to deal with it. Story on Page 21.

Publishing poetry is an effort to which many university presses are committed. Story on Page 25.

Entrance requirements at Oxford and Cambridge Universities may be liberalized in an effort to attract a greater variety of students. Story on Page 19.

ALSO IN THIS ISSUE

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CHRONICLE PHOTOGRAPH BY JOHN C. PHILLIPS

Colleges are not honoring their educational obligations to athletes, the Rev. Jesse Jackson, above, said at a press conference last week.

Black Educators Call for Repeal of NCAA's Academic Requirement

By CHARLES S. FARRELL

WASHINGTON

In their most stinging indictment to date, several black educators last week called for the complete repeal of a new rule requiring tougher academic standards for college athletes.

Under the rule adopted by National Collegiate Athletic Association in January, an athlete entering college must have a combined score of 700 on the Scholastic Aptitude Test or a 15 on the American College Testing Program's examination if he is to compete in sports in his freshman year. Blacks have consistently scored lower than whites on such tests.

The new rule, which takes effect in 1986, also requires a 2.0 grade-point average in 11 academic high-school courses.

At a press conference at the University of the District of Columbia, the educators, along with the Rev. Jesse Jackson, president of Operation PUSH, said the issue should not be how well someone does on a test, but how well he is prepared to function in society.

The N.C.A.A. acted as a "Trojan horse," Mr. Jackson charged, "to protect the interests of major white universities who have violated the contract of educating these people."

He also said standardized tests were based on "a cultural frame of reference

Continued on Page 18, Column 3

Injunction Casts Doubt on Fate of Draft Rules

Some colleges prepare to enforce them anyway

By JANET HOOK

Many college officials are debating whether they should prepare to administer a new law requiring young men to register for the draft before receiving federal student aid, even though a federal district judge in Minnesota this month delayed enforcement of the law.

Some are now operating on the assumption that the law will not take effect as scheduled on July 1, despite uncertainties about the application of the temporary injunction issued this month by Judge Donald D. Alsop of the U.S. District Court for Minnesota.

Other institutions, fearing delays in student-aid awards if the law does take effect in July, have already begun to ask financial-aid applicants for proof that they have registered for the draft.

Critics of the law linking draft registration and student aid regard the injunction issued by Judge Alsop as the death knell for the legislation.

Colleges Accused of 'Whining'

Barry Lynn, president of Draft Action—a group opposing both draft registration and the student-aid tie-in—told reporters he hoped Judge Alsop's ruling, which held that the law was likely to be found unconstitutional, would "give great pause" to colleges "whose only expression of opposition has been whining about the administrative and paperwork burden this law would impose."

On Capitol Hill, lawmakers who have

Continued on Page 12, Column 1

South Africa Proposes Quotas on Blacks at Universities

By HELEN ZILLE

CAPE TOWN

Officials at South Africa's predominantly white English-language universities have strongly attacked a government plan to shift the responsibility for maintaining apartheid in higher education from the Ministry of Education to the universities themselves.

The controversial plan would eliminate the government-administered permit system for admitting black students to white institutions and replace it with a university-administered quota system.

Spokesmen for the English-language universities say they are opposed to permits, quotas, or any other racially based restriction on university admissions.

Under the permit system, black students may be admitted to universities reserved for whites under South Africa's apartheid laws only if they obtain permission from the Ministry of Education. Generally, permission is not granted unless the courses that a black student wishes to study are not available at one of the country's nine universities reserved for people not classified by the government as white.

Under the new system, the Minister of Education would have the power to determine the number of black students permitted at each white university. The number would probably vary from one university to another and be well below 20 per cent of each institution's total enrollment.

The universities would then be responsible for limiting the number of black students admitted.

The measure, which is expected to be

Continued on Page 20, Column 1

EVENTS IN ACADEME '83

Events in Academe: a Special Pull-Out Section

- Organizations sponsoring meetings: Page 34
- Subjects of meetings: Page 38
- Chronological listings of meetings: Page 39
- Athletic meetings and championships: Page 54
- Deadlines for fellowships, grants, papers, and prizes: Page 55

Readers may want to save this section.

FACT–FILE

Endowments of 194 Colleges on June 30, 1982

1982 rank	Institution	Market value	
		June 30, 1981	June 30, 1982
1.	Harvard University	$1,713,350,000	$1,711,310,000
2.	University of Texas System ‡	1,485,090,000	1,626,210,000
3.	Princeton University	685,763,000	885,772,000
4.	Columbia University	590,400,000	772,562,000
5.	Yale University	792,600,000	740,600,000
6.	Stanford University ‡	598,990,000	680,621,000
7.	Massachusetts Inst. of Technology	500,237,000	466,977,000
8.	University of Chicago	397,100,000	394,200,000
9.	Rice University	376,865,000	333,487,000
10.	Northwestern University ‡	320,552,000	322,286,000
11.	Cornell University	360,441,000	317,592,000
12.	New York University ‡	276,351,000	308,500,000
13.	Washington University (Mo.)	266,579,000	302,200,000
14.	Rockefeller University	270,568,000	240,563,000
15.	Dartmouth College	234,055,000	230,071,000
16.	Johns Hopkins University	242,430,000	223,994,000
17.	University of Pennsylvania	232,667,000	218,250,000
18.	University of Notre Dame	218,243,000	203,767,000
19.	California Institute of Technology †	202,090,000	192,426,000
20.	Vanderbilt University	174,715,000	183,889,000
21.	University of Southern California	not reported	182,925,000
22.	University of Virginia	179,697,000	154,229,000
23.	Duke University	153,950,000	151,381,000
24.	McGill University ††	153,200,000	147,700,000
25.	Case Western Reserve University	142,286,000	141,222,000
26.	Wellesley College	133,192,000	126,224,000
27.	Smith College	129,126,000	125,150,000
28.	Carnegie-Mellon University	132,468,000	124,176,000
29.	Wesleyan University	134,395,000	121,964,000
30.	Brown University	139,484,000	121,041,000
31.	University of Delaware	143,996,000	119,168,000
32.	University of Michigan	116,482,000	115,309,000
33.	Southern Methodist University ††	116,855,000	110,368,000
34.	University of Cincinnati	103,612,000	103,421,000
35.	Baylor University ††	87,500,000	101,639,000
36.	Vassar College	104,834,000	98,370,000
37.	University of Pittsburgh	113,216,000	98,262,000
38.	Oberlin College	103,102,000	95,924,000
39.	Loyola University of Chicago	83,615,000	95,059,000
40.	Amherst College	95,009,000	94,412,000
41.	Rensselaer Polytechnic Institute	103,943,000	94,191,000
42.	Ohio State University	84,794,000	94,165,000
43.	Berea College	97,534,000	91,161,000
44.	Wake Forest University	77,589,000	89,151,000
45.	University of Richmond	88,133,000	86,768,000
46.	Grinnell College	85,552,000	83,220,000
47.	Georgetown University	71,844,000	76,479,000
48.	Pomona College	72,530,000	72,765,000
49.	Brandeis University	72,528,000	71,931,000
50.	Lehigh University	72,980,000	70,905,000
51.	Tulane University	not reported	67,679,000
52.	Middlebury College	70,211,000	66,383,000
53.	Lafayette College	71,558,000	65,142,000
54.	Thomas Jefferson University	58,995,000	60,149,000
55.	Carleton College	61,966,000	60,035,000
56.	State U. of New York, Buffalo ‡‡	61,478,000	59,758,000
57.	Rochester Institute of Technology	64,656,000	58,622,000
58.	Mount Holyoke College	61,449,000	58,382,000
59.	Syracuse University	58,816,000	56,012,000
60.	Saint Louis University	not reported	55,572,000
61.	Boston University	60,898,000	55,064,000
62.	University of Miami ††	47,707,000	51,818,000
63.	Rutgers University	42,601,000	49,404,000
64.	Occidental College	46,555,000	49,226,000
65.	Bryn Mawr College ††	55,521,000	48,977,000
66.	University of Wisconsin System	43,267,000	47,040,000
67.	Earlham College	49,719,000	46,299,000
68.	Baylor College of Medicine	45,470,000	44,491,000
69.	Trinity College (Conn.)	47,181,000	44,373,000
70.	Academy of the New Church	55,797,000	44,186,000
71.	Cooper Union	44,393,000	43,890,000
72.	Bucknell University	41,254,000	42,994,000
73.	Worcester Polytechnic Institute	41,547,000	42,694,000
74.	University of Missouri	34,027,000	42,108,000
75.	Kansas U. Endowment Association	not reported	41,873,000
76.	Colgate University ††	39,653,000	41,415,000
77.	University of North Carolina	43,605,000	41,377,000
78.	Hamilton College (N.Y.)	49,658,000	39,544,000
79.	Southwestern University	37,915,000	37,853,000
80.	Southwestern at Memphis	not reported	37,409,000
81.	Radcliffe College	40,347,000	37,220,000
82.	Hampton Institute	36,656,000	36,031,000
83.	Haverford College	38,179,000	35,773,000
84.	Colorado College	44,181,000	34,720,000
85.	Agnes Scott College	35,487,000	34,627,000
86.	Willamette University ††	not reported	34,118,000
87.	Drew University	34,062,000	33,860,000
88.	University of Santa Clara	28,402,000	32,168,000
89.	University of Houston System	not reported	31,952,000
90.	Whitman College	31,760,000	31,598,000
91.	Philadelphia C. of Pharmacy & Science	not reported	30,826,000
92.	Claremont McKenna College	31,516,000	30,317,000
93.	University of Alabama System †	25,795,000	29,120,000
94.	Colby College	29,367,000	29,104,000
95.	Davidson College	27,656,000	28,906,000
96.	University of Vermont	32,006,000	27,644,000
97.	Teachers College, Columbia U. ‡	26,465,000	26,309,000
98.	Lawrence University	27,369,000	26,150,000
99.	Denison University	21,923,000	25,567,000
100.	University of Denver	27,014,000	25,351,000
101.	Ohio University	$27,050,000	$25,155,000
102.	University of Tennessee, Knoxville	24,165,000	24,616,000
103.	Simmons College	22,014,000	24,448,000
104.	Berry College	25,535,000	24,012,000
105.	College of Wooster	24,033,000	23,912,000
106.	Howard University	not reported	23,059,000
107.	Spelman College	21,610,000	22,721,000
108.	Bates College	not reported	22,200,000
109.	George Washington University	21,834,000	21,187,000
110.	Marquette University	19,827,000	21,031,000
111.	Rhode Island School of Design	24,556,000	20,670,000
112.	University of Utah	16,883,000	20,404,000
113.	Ohio Wesleyan University	18,849,000	20,363,000
114.	Sweet Briar College	20,946,000	19,932,000
115.	University of Maryland	20,714,000	19,501,000
116.	Pennsylvania State University	18,320,000	18,848,000
117.	Cornell College (Iowa)	19,280,000	18,665,000
118.	Auburn University †	not reported	18,511,000
119.	Saint Mary's College (Ind.)	8,645,000	18,357,000
120.	Mercer University	11,357,000	18,208,000
121.	North Carolina State University	8,408,000	17,957,000
122.	Hendrix College **	18,926,000	17,879,000
123.	University of Puget Sound ‡	15,088,000	17,815,000
124.	Furman University ††	15,762,000	17,711,000
125.	Birmingham-Southern College	not reported	17,615,000
126.	Knox College	not reported	17,573,000
127.	University of Tulsa ††	13,537,000	17,495,000
128.	University of Arizona	14,367,000	16,986,000
129.	Franklin and Marshall College	16,218,000	16,825,000
130.	C. of William and Mary Association	12,204,000	16,634,000
131.	Wheaton College (Mass.)	17,656,000	16,381,000
132.	Michigan State University	15,798,000	16,305,000
133.	Pratt Institute ‡	not reported	16,130,000
134.	Alma College	16,455,000	15,771,000
135.	Reed College	16,786,000	15,220,000
136.	Wittenberg University	16,457,000	15,199,000
137.	American University of Beirut	not reported	15,183,000
138.	Clark University	17,289,000	15,128,000
139.	Oregon State Board of Higher Ed.	15,377,000	14,901,000
140.	Baldwin-Wallace College	14,894,000	14,750,000
141.	Kalamazoo College	14,805,000	14,579,000
142.	Indiana University	13,452,000	14,076,000
143.	University of Nevada System	not reported	13,746,000
144.	Wentworth Inst. of Technology	14,577,000	13,695,000
145	Connecticut College ††	14,046,000	13,130,000
146.	Allegheny College	13,659,000	12,495,000
147.	Temple University	12,722,000	12,187,000
148.	Drake University ††	11,875,000	11,523,000
149.	University of Maine	11,983,000	11,307,000
150.	University of Tennessee, Chattanooga	15,614,000	11,279,000
151.	Dickinson College	17,625,000	11,254,000
152.	University of Dayton	11,403,000	11,132,000
153.	Norwich University	12,849,000	10,941,000
154.	Washburn College *	11,403,000	10,560,000
155.	Clarkson College of Technology	6,603,000	10,475,000
156.	University of Iowa Foundation	9,740,000	10,246,000
157.	Muhlenberg College	9,045,000	10,199,000
158.	Saint Norbert College	8,659,000	9,698,000
159.	Bryant C. of Business Administration **	not reported	9,280,000
160.	Wells College	8,500,000	8,943,000
161.	Babson College	7,441,000	8,468,000
162.	Skidmore College	7,288,000	8,094,000
163.	University of Arkansas, Fayetteville	9,005,000	7,938,000
164.	Alfred University	8,089,000	7,905,000
165.	Doane College	7,333,000	7,820,000
166.	Ohio Northern University ‡	7,684,000	7,646,000
167.	College of William and Mary	5,529,000	7,608,000
168.	Rollins College ††	7,314,000	7,505,000
169.	Hope College	6,490,000	7,460,000
170.	Moravian College	6,027,000	6,869,000
171.	University of Scranton ††	6,781,000	6,411,000
172.	University of Nebraska	7,148,000	6,366,000
173.	University of Akron	3,940,000	5,956,000
174.	University of Evansville	5,936,000	5,864,000
175.	Washington State University	5,351,000	5,787,000
176.	Otterbein College	not reported	5,065,000
177.	Medical College of Pennsylvania	5,212,000	4,601,000
178.	Kenyon College	10,856,000	4,318,000
179.	Russell Sage College	not reported	3,840,000
180.	Chapman College ††	3,157,000	3,554,000
181.	Canisius College	3,538,000	3,482,000
182.	Philadelphia C. of Textiles & Science	3,599,000	3,478,000
183.	Western Michigan University	2,564,000	2,680,000
184.	Trinity College (D.C.)	2,639,000	2,635,000
185.	Arizona State University	2,325,000	2,352,000
186.	University of Massachusetts	not reported	2,238,000
187.	University of Tampa	2,928,000	2,222,000
188.	Monmouth College	1,472,000	2,218,000
189.	Newberry College	2,055,000	2,124,000
190.	Eastern Michigan University	1,938,000	1,881,000
191.	University of Connecticut	1,833,000	1,717,000
192.	University of Mississippi	1,850,000	1,713,000
193.	Ocean County College	not reported	738,000
194.	Rockhurst College	not reported	201,000

* As of December 31
** As of July 31
† As of September 30
†† As of May 31
‡ As of August 31
‡‡ As of March 31
Note: Table includes only institutions participating in the voluntary comparative-performance study by the National Association of College and University Business Officers.

Resist New Cuts in School Funds, Jackson Urges

WASHINGTON

Dozens of black educators and civil-rights leaders gathered at the University of the District of Columbia last week to assess the status of the education of blacks and develop recommendations for its improvement.

The two-day conference, sponsored by the university and PUSH for Excellence, the education arm of Operation PUSH, was intended to "put education back on the front burner of the American government," according to the Rev. Tyrone Crider, national director of PUSH for Excellence.

Mr. Crider said the need for such a conference had come about because of budget cuts in education by the Reagan Administration and the generally low-priority position the President has assumed toward education.

The cuts, as well as the state of the economy, have created problems at colleges and universities, problems that have made the education of blacks secondary, said the Rev. Jesse Jackson, who heads PUSH for Excellence as well as Operation PUSH.

"By bringing together a credible body of black and Hispanic scholars," Mr. Jackson said in an interview, "we can assess where we are and set up a wall of resistance to further cuts so we can continue with the progress of black education."

That progress includes channeling more blacks into science and technology and into professional careers, he said, telling students who attended the opening of the conference:

"We need the opportunity and the input, but effort must exceed opportunity in order for change to take place. You have to be prepared. If blacks use the same energy that is applied to our motor skills to develop our cognitive skills, there is nothing to suggest that we can't be as dominant in science and in computers and in law and in journalism as we are in football, basketball, and baseball."

The topics of discussion at the conference included forums on science and technology and how they relate to the future of blacks, education and black economic and social development, and the role of the black church in the propagation of education, to name a few.

Speakers included Margaret Bush Wilson, chairman of the board of the National Association for the Advancement of Colored People; the historian John Hope Franklin of Duke University; and Mary Frances Berry, a member of the U.S. Commission on Civil Rights, president of the board of PUSH for Excellence, and a professor of history and law at Howard University.

Mr. Crider said conference participants were helping to develop recommendations to improve the status of black education in America. They should be ready by early next month.

He said one of the recommendations would be to stress continuing education as a means for blacks to acquire marketable job skills.

Another recommendation, which Mr. Crider said would become a reality this summer, is a computer camp for elementary-school, secondary-school, and college students.

"Since technology is the wave of the future," he said, "we must train our children to compute. If they can go to basketball camps, we feel they can go to computer camps."

—CHARLES S. FARRELL

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News Summary

Articles on inside pages

A professor at George Washington University has been arrested in Pennsylvania for using false names to obtain teaching positions at two state colleges there. Story on Page 2.

Sheldon L. Glashow, a Nobel laureate at Harvard University, has proposed building a giant accelerator able to search for oil and gas—and Texas A&M University may take him up on it. Story on Page 14.

Applications for next fall's freshman class are down slightly from a year ago. Story on Page 12.

The Administration has decided not to revise regulations to enforce federal legislation barring discrimination against the handicapped. Story on Page 15.

A House subcommittee has approved a measure placing new restrictions on the use of animals in laboratory experiments. Story on Page 15.

Women in college administration have not completely won their battle for acceptance by male colleagues. Story on Page 27.

A federal judge has ruled that the City University of New York discriminated against woman faculty members and administrators by paying them lower salaries than it paid men. Story on Page 30.

Writing a college history, an activity that is becoming a respectable scholarly pursuit, is not without professional risks. Story on Page 31.

Libyan students in the United States have been barred from taking courses in aviation and nuclear-related studies at colleges and universities here. Story on Page 25.

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Colleges Struggling to Cope with the Computer Age

By ROBERT L. JACOBSON

For most colleges and universities, coming to grips with the computer age is proving to be much harder than might be expected for institutions where information is such an important commodity.

Indeed, say experts in computing and higher education, only a relatively few campuses are successfully adapting to the latest technological developments. For the most part, they say, academe is not only failing to keep up with the new technology and related demands, but is falling further and further behind.

If the trend persists, those experts say, the ultimate cost—particularly in lost educational opportunities—will be staggering.

But in case after case, colleges are discovering that they don't have the money, personnel, or plans to take adequate advantage of existing technology, let alone the breakthroughs still to come.

"The technology is there," goes the refrain. "What are we going to do about it?"

At the same time, however, an informal consensus appears to be developing among college officials and computer specialists about what the major issues are and, to some extent, how they ought to be handled.

Many college officials see the incipient computer revolution as something more than a pressing academic and administrative challenge, says Russell Edgerton, president of the American Association for Higher Education. It may also provide a chance finally to escape from the "gloom and doom" talk that has enveloped their institutions in recent years, he says.

This week in Washington, Mr. Edgerton's association is holding its annual conference on the theme "Colleges Enter the Information Society." The topic was chosen, he says, in part because of new public awareness of "the connection between education and economic revitalization" through high technology.

The Boom in Microcomputers

From numerous interviews and discussions with campus officials comes a complex and ambitious outline of where higher education may be headed in the computer age.

Technologically, the boom in microcomputers—often called personal computers—is probably the single most important development affecting campuses today.

There are many other important considerations in communications and related technologies, including the need to moderize campus telephone systems. But with desk-top equipment now making computing power widely available, many college officials believe they must radically change how they view the role of computing for administrative

Continued on Page 10, Column 1

Computers on the Campus

- Carnegie-Mellon University's plans to computerize itself. ..... Page 6
- The shortage of "supercomputers" at U.S. universities. .... Page 8
- Salaries of college faculty members in computer science. .... Page 8
- Survey of how professors use personal computers. .... Page 10
- Books and articles on using computers in teaching. .... Page 10
- Point of View: Computer mania is not enough. .... Page 72

Graduate Schools Report Increases in Applications

By MALCOLM G. SCULLY

Many graduate schools at U.S. universities are reporting substantial increases in the number of applicants for next fall.

At some institutions, applications are up not only in such popular fields as engineering and computer science, but also in the humanities and physical sciences—areas that have experienced declines in recent years.

Graduate-school officials attribute the increases at least in part to the poor job market for recipients of bachelor's degrees. Many of this year's college seniors, they say, may be planning to continue their education to avoid unemployment or underemployment.

They also report that some people who have lost their jobs in recent months apparently have decided to apply to graduate schools.

"The economy has a lot to do with it," said George W. Kunze, dean of the graduate school at Texas A&M University, where applications at the end of February were 40 per cent higher than at the same time last year. "A lot of people are coming back to sharpen their skills because they have been laid off."

Mr. Kunze said that in addition to college seniors, the appl[illegible]ool for next fall included "a lot of A[illegible]"—people who

Continued on Page 12, Column 4

U.S. Decides Students Seeking Aid Won't Have to Show Draft Papers

By JANET HOOK

WASHINGTON

The Education Department announced last week that it would significantly revise rules for enforcing a new law barring men from receiving federal student aid if they fail to register for the draft.

Department officials said they would drop—at least for the next two years—a requirement that draft-age men provide college officials with copies of their registration documents before they can receive federal aid.

Although that change was regarded as a significant improvement by Congressional and college critics of the earlier rules, the House Subcommittee on Postsecondary Education approved a bill last week that would delay application of the new law for seven months, to allow more time for enforcement procedures to be put in place.

The law linking draft registration and student aid is scheduled to apply to federal grants and loans awarded for college terms that begin after June 30. Under the bill approved by the House subcommittee, HR 2145, the effective date would be postponed until February 1.

That delay is needed, proponents argued, because of the uncertainty and confusion generated by a recent federal court order temporarily barring enforcement of the law.

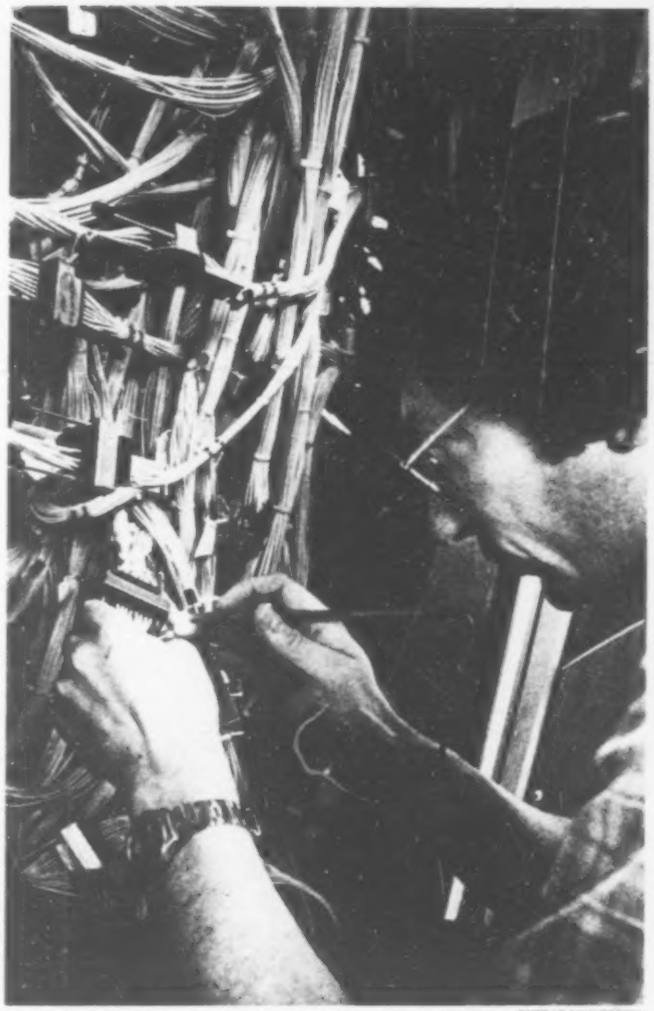
Judge Donald D. Aisop of the U.S. District Court for Minnesota recently issued that injunction pending the resolution of a case before him that challenges

Continued on Page 20, Column 1

Women's Basketball: Recruiting the Stars

Recruiting the superstars of women's basketball has become a competitive business for college coaches. One of the top recruiters is Sonja Hogg, coach of Louisiana Tech University's Lady Techsters, shown at left scouting a high-school game.

For details, see the "Athletics" section, which begins on Page 21.



An engineer works to connect the more than 100,000 electrical fittings needed to install Purdue's Cyber 205.

PURDUE UNIVERSITY

Dearth of New 'Supercomputers' Called Threat to U.S. Leadership in Science and Technology

4 American universities now have the giant machines, but experts say that's far from enough to meet current needs of scientists and engineers

By **JACK MAGARRELL**

WASHINGTON

With the installation of a Cyber 205 at Purdue University early this year, the total number of American universities with "supercomputers" rose to four.

That's far short of enough supercomputers, an elite class of the most powerful computers currently available, says a panel of experts in a report on a study sponsored by the National Science Foundation and the Department of Defense.

While popular attention has been captured by the proliferation of personal microcomputers in classrooms, offices, and homes, there are warnings from the most advanced levels of computer science that "the power of current and projected supercomputers is insufficient to meet existing needs in science, engineering, and technology, both military and civilian."

The panel's report says that U.S. leadership in supercomputer technology and in the use of supercomputers in science and engineering "is seriously undermined by the lack of broad-scale exploration, outside of a few national laboratories, of the scientific and engineering opportunities offered by supercomputing and by a slowdown in the introduction of new generations of supercomputers."

The threat to American leadership is intensified, the report says, by "vigorous governmental programs in the United Kingdom, West Germany, and Japan to make supercomputers available and easily accessible to their research and technological communities."

The Japanese government's supercomputer project is aimed at developing by 1989 a machine 1,000 times as fast as current machines, the report says, adding that "there are no national plans to stimulate the development and use of advanced computer technology in the U.S."

Nobel Laureate's View

The importance of supercomputers to theoretical scientists was emphasized by Kenneth G. Wilson, a professor of physical science at Cornell University and winner of last year's Nobel Prize in Physics.

"Theorists are learning to go beyond simple models to tackle the complexities of real life," Mr. Wilson said in testimony submitted to the House Committee on Science and Technology. "The recent increase in hiring of theorists by industry is a consequence of this trend.

"In order to continue this progress, theoretical scientists must have access to scientific large-scale computing far beyond current supercomputer capabilities; in fact, even the Japanese national superspeed computing project has far too conservative goals to meet U.S. theorists' needs."

Sharing at Colorado State

Besides Purdue, the institutions with supercomputers are Colorado State University, the University of Georgia, and the University of Minnesota.

At Colorado State, use of the Cyber 205 supercomputer, which was installed a year ago, has been shared with government agencies and private industry as well as with other universities.

The National Bureau of Standards has a direct line to the Colorado State computer. Five oil companies are full-time members of the university's Institute for Computational Studies, through which use of the computer is shared.

Edward H. Coughran, assistant to the director of the institute, says that both industries and universities have problems that only a supercomputer can solve, but they do not have enough to justify the purchase of their own multimillion-dollar machine.

Colorado State's supercomputer cost $12-million and was financed by the C.S.U. Research Foundation, which borrowed the money and will repay the loan with payments made by those who use the machine.

The other universities with supercomputers anticipate increased sharing of their machines with outside users in the future.

At the University of Minnesota, where a Cray 1 was installed two years ago, Frank Verbrugge, director of university computer services, says that use of the machine by researchers from other universities has grown slowly because the institutions hadn't budgeted money to pay for the computer time.

The University of Georgia, which has had its Denelcor HEP supercomputer for about eight months, has started offering seminars to researchers from other institutions on how to use it, says James L. Carmon, assistant to the president for computing.

Purdue's supercomputer was purchased with bonding authority granted by the Indiana legislature specifically for improvement of computer facilities, according to Saul Rosen, director of the university's computing center.

Purdue expects within the next year to establish a laboratory, to be called the Center for Parallel and Vector Computing, to study the uses of supercomputers, Mr. Rosen says.

Expert Advice Needed

Peter D. Lax, a professor of mathematics at New York University and a member of the National Science Board, the policy-making arm of the National Science Foundation, headed the "panel on large-scale computing in science and engineering" that submitted its report and recommen-

Computer-Science Professors' Salaries Average $28,069

Faculty members in computer science earned an average basic salary of $28,069 in academic 1981-82, according to a new Chronicle Survey. The professors supplemented that income by earning an average of $8,220 from other professional activities, including summer-school teaching.

The survey found that faculty members at public institutions earned an average nine-month salary of $28,176, a bit above the overall average for computer-science professors. However, they made less—$7,883—in extra income.

The reverse was true for computer scientists at private institutions. The survey found that their average salary was $27,779 and they made $9,121 from other professional activities, which included research, administrative duties, extra teaching, and consulting.

Computer scientists at liberal-arts colleges earned an average salary of $20,905. Their extra earnings averaged $835.

The country's higher-education institutions have from 800 to 900 computer-science faculty members with doctoral degrees, according to estimates.

Computer scientists say the number of faculty members, which is well below the number of positions available, has remained "nearly fixed" for several years.

Since 1980 the universities have produced about 200 graduates with doctorates in computer science each year, according to Joseph F. Traub, chairman of the computer-science department at Columbia University. "Half of these have gone into industry and half have gone into academe," he says.

Mr. Traub says there are about 1,300 jobs advertised each year for computer scientists with doctoral degrees. Over 600 of these are located in academe.

Mr. Traub says computer scientists at research universities, such as Columbia, in geographic areas where there are opportunities for additional income from research and consulting can earn an annual income "close to that of scientists in leading research laboratories" in industry. However, he says, "the total income of faculty members in places with no such opportunities will be lower."

The information on basic salaries and additional income of computer-science faculty members was obtained in a survey conducted for *The Chronicle* by John Minter Associates, a higher-education research organization in Boulder, Colo.

—BEVERLY T. WATKINS

	Average annual salary			Average earnings beyond base salary, 1981-82		
	1981-82	1982-83	1-year change	Within the institution	Outside the institution	Total
Private Ph. D.-granting universities	$30,032	$32,924	9.6%	$5,245	$5,960	$16,145
Private institutions granting other graduate degrees	25,141	27,520	9.5%	3,395	3,118	6,057
Private liberal arts institutions	19,245	20,905	8.6%	1,762	548	835
Public Ph.D.-granting universities	30,747	32,931	7.1%	4,359	7,953	12,848
Public institutions granting other graduate degrees	25,338	27,110	7.0%	2,978	4,161	5,466
Public 2-year colleges	22,915	24,363	6.3%	3,051	2,586	5,669
Public institutions						
Professor	33,349	35,326	5.9%	3,832	7,167	11,223
Associate professor	26,899	29,030	7.9%	4,186	2,919	6,889
Assistant professor	22,738	24,625	8.3%	2,884	8,645	6,123
Private institutions						
Professor	31,260	33,817	8.2%	3,270	5,283	9,722
Associate professor	22,725	25,025	10.1%	3,053	3,051	5,108
Assistant professor	20,644	22,397	8.5%	3,058	1,809	500
All public institutions	26,366	28,176	6.9%	3,441	7,574	7,887
All private institutions	25,408	27,779	9.3%	3,744	6,139	9,121
Total	**$26,107**	**$28,069**	**7.5%**	**$3,523**	**$7,187**	**$8,220**

Note: Survey data are based on responses of 259 faculty members from the fall of 1980 through the fall of 1982. All salaries are adjusted to a nine-month basis. Technical inquiries about the survey design should be addressed to John Minter Associates, P.O. Box 107, Boulder, Colo. 80306.

SOURCE: SURVEY FOR THE CHRONICLE BY JOHN MINTER ASSOCIATES

Computer Age

Continued from Page 1

and scholarly purposes. No longer can a central campus computer be expected to satisfy all the needs of administrators, faculty members, and students. Now officials must carefully consider—or rethink—who needs to do what with what equipment and in what manner. For most colleges, that probably means determining how to create an efficient "network" out of various kinds of equipment from different segments of the institution.

At one Western university, for example, a dean reports that administrators have become "very frustrated" because they can't seem to get the information they need for their own departments and divisions out of the university's central "mainframe" computer.

"The high priests who control the data say they can't provide it," says the dean, so he's been looking into the possibility of buying a personal computer for his office. Several of his colleagues are doing the same thing, all pretty much on their own initiative.

'It's Chaos'

"Everybody's going out and doing their own little study on computing and saying, 'Here's what we want to have,' " says the dean. "It's chaos."

As an alternative to such disorder, the development of an overall campus computing plan is widely viewed as essential.

Central to that process, the experts agree, is a highly collaborative effort to set priorities and long-term goals. It should involve top campus officials, including the chief executive and his principal deputies, they say, as well as faculty members and students. Local computer specialists should be consulted for their experience and knowledge, but the basic options on campus computing come down to matters of education policy that cannot be delegated to such people alone.

The attitude of campus leaders toward their own computer specialists is sometimes a curious mixture of admiration and reserve. Already in such great demand that their salaries may exceed those of top college officials, the specialists are not always thought to have a solid understanding of their institution's overall purpose and needs.

Consequently, some speakers at conferences, workshops, and seminars on campus computing are cautioning academic officials to take direct responsibility for making the key decisions, instead of leaving it all to the "technologists."

"It's important that you talk to those people and tell them what you want," said James W. Johnson, director of information technology at the University of Iowa, at a recent seminar for administrators. "And if they don't speak English, give them a dictionary and make them talk English, because you people are the ones who are ultimately going to be left holding the bag."

A related issue is how institutions can encourage their own faculty and staff members to acquire and use personal computers. The task can be more difficult than might be anticipated.

At the University of Colorado at Boulder, where Chancellor Harrison Shull has said he wants all 1,100 faculty members to have their own personal computers within two years, Gary D. Devine, director of management systems, says a state law against using public funds for personal property has interfered with plans to share both the cost and ownership of computers with employees.

Many campuses are struggling, meanwhile, to meet rapidly growing instructional demands in computer science. There are frequent reports of students queuing up, often late at night, for access to terminals—and then facing further delays because computing and printing facilities are overloaded. Some institutions, Yale University among them, have curbed the use of computers for word processing and other course work that does not require computing.

Many academic computer experts insist that the hard choices over which equipment and which software to buy, how much, and for what purposes, must depend not only on available resources, but also on how a particular college or university views its mission. Not every institution should try to be a Carnegie-Mellon University, they say, and attempt to provide virtually universal access to computers.

Individual colleges must determine for themselves, say the experts, what is important to them and in what configuration: Administrative computing or instructional applications? Data processing or word processing? A large central computer with many terminals or many self-sufficient desk-top machines? And to what extent do officials want people "down the line" to be able to interact with central computers? Such questions tend to have more practical value the earlier they are raised.

Deciding on Strategy

"What you have to do," says Douglas E. Van Houweling, Carnegie-Mellon's vice-provost for computing and planning, "is decide what your strategy is. Don't start with the technology."

When consumers seem confused by the wide range of computers and program packages on the market, salesmen often ask them, "What do you want the equipment to do?" The same question is probably valid for college and university officials trying to select the "right" combination of hardware and software for their institutions. Different machines and different software do different things, and not all of them are compatible.

The head of program development at a school of public health in the Southwest relates, for example, that officials in two divisions of her institution independently purchased computer systems for data processing and word processing last year only to discover, too late, that the systems couldn't "talk" to each other.

Such stories are not unusual on the campuses these days, yet most computer specialists tend to minimize their long-range importance. Eventually, they say, the industry is likely to make certain that incompatibility is not an issue. Even now, the technology exists to eliminate most of it.

In the meantime, colleges should be more concerned about getting the most computing capacity they can for their chosen objectives, the experts say. Hardware costs are dropping rapidly—"15 to 25 per cent a year on a compound basis," says Carolyn P. Landis, vice-president of EDUCOM, a consortium of about 450 colleges and universities interested in computers and communications technology. Usually more important than the cost of hardware, she says, are the costs of software, personnel, and peripheral equipment.

Like other consumers of the new technology, college officials often wonder if they should postpone new purchases, since computing capacity is rapidly increasing even as prices decline. They also worry that expensive equipment may soon become obsolete.

In response, the experts generally have this advice: Don't wait. Computers ultimately produce such great savings through increased productivity and efficiency that it pays to buy what you can now—leasing the hardware if necessary.

"To not do something is going to cost you," says Charles R. Thomas, executive director of CAUSE, a national association of campus information technologists.

On the other hand, Mr. Johnson of the University of Iowa cautions college officials not to feel pressured into acquiring all the latest hardware and software on the market.

"Just because there's a new, brighter box on the block doesn't mean it's more worthwhile for doing your task," he says. "If you have a small computer, for instance, doing word processing, and everyone's satisfied, then what difference does it make if the new one's got more bells and whistles and lets you access 5,000 records? If you're not doing it, that's irrelevant."

Besides, Mr. Johnson adds, computer hardware generally lasts only five to seven years before it needs to be replaced, but by then it is likely to have paid for itself.

Software is another matter, however. There the consensus appears to be that—for most major applications, at least—it ultimately costs less to buy commercial packages than to ask campus programmers to develop their own. For such do-it-yourself software, Mr. Van Houweling says he takes the highest cost estimate he can get and doubles or triples it. Software development, he warns, is "a very arcane art which very expert people do very poorly at."

How Faculty Members Use Microcomputers

OAK PARK, ILL.

In their teaching, college professors use personal computers most often for mathematical calculations.

But for faculty members' personal use, the microcomputer serves most frequently as an advanced typewriter.

Those findings are reported by TALMIS, a consulting service here for publishers of computer software, on the basis of a survey of 607 college and university faculty members who use microcomputers.

Use in Teaching

The proportions of faculty members reporting various uses of microcomputers in working with students were:

Mathematical computation	60%
Simulation	46%
Presenting instruction	42%
Teaching computer literacy	42%
Teaching programming	41%
Drill and practice	33%
Word processing	30%
Graphics	25%
Searches of data bases	21%
Testing	19%
Educational games	12%
Research and other	5%

The use of microcomputers varies among the academic disciplines.

For example, computation accounts for 34 per cent of the use in social-science departments, compared with 13 per cent in business departments and 7 per cent in education departments.

Education departments, according to the TALMIS survey, made the most use of of microcomputers in teaching computer literacy, which is becoming a recognized aspect of training schoolteachers.

In the liberal arts, drill and practice accounted for 25 per cent of the use of microcomputers and word processing for 21 per cent.

In library courses, 37 per cent of the use of microcomputers is in searching computerized collections of information.

The proportion of faculty members using microcomputers for teaching computer programming is highest in computer-science departments (35 per cent) and business departments (27 per cent).

Personal Use

Faculty members participating in the TALMIS survey reported the following proportions of their total personal use of microcomputers:

Word processing	53%
Computation	45%
Record keeping	34%
Recreation	33%
Creating teaching programs	32%
Graphics	27%
Accounting	12%

Jeanne Dietsch, president of TALMIS, said the survey showed that academic departments spent an average $1,061 per year on programs, or software, for microcomputers.

Departments of computer science spent the most—$1,810 a year—on software, followed by education, $1,070; business, $795; mathematics, $785; science, $620; social science, $410, and liberal arts, $365.

Members of science, mathematics, and liberal-arts departments develop more of their software themselves than do members of other departments, Ms. Dietsch said. Education departments, in contrast, get a larger share of their software from commercial publishers—in part, she said, to acquaint students with the variety of software on the market.

—JACK MAGARRELL

U.S. to Publish 'Kit' on Computer-Based Training

A *Computer-Based Training Starter Kit* is scheduled to be published next month by the federal government. Written by representatives of 13 U.S. agencies, it is directed mainly at trainers in government but contains information that also may be useful in colleges and universities.

Free copies of the publication may be requested from C.B.T. Starter Kit, Internal Revenue Service, Training and Development Division, Services Section, PM:HR:T:S, 2221 Jefferson Davis Highway, Arlington, Va. 22202.

Following are some of the references cited in the kit:

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"CAI Update: Managing Training Through Computer Technology," by Harold F. Ramhlow (*NSPI Journal*, National Society for Performance and Instruction; September, 1981).

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"Evaluating the Emerging Market: A Resource Guide to Computer-Aided Instruction," by Gloria Gery (*Data Training*, Warren/ Weingarten, Inc., 176 Federal Street, Boston 02110; May, 1982).

"How to Avoid the Predictable Headache of Computer-Assisted Instruction," by Paul H. Selden (*Training: The Magazine of Human Resources Development*; September, 1981).

"Microcomputers in Industrial Education," conference proceedings, by Sheldon Fischer (Society for Applied Learning Technology, 50 Culpeper Street, Warrenton, Va. 22186; 120 pages; $40; 1979).

"Microcomputer-Based Training in Business and Industry," by Greg P. Kearsley, Michael J. Hillelsohn, and Robert J. Seidel (*Journal of Educational Technology Systems*, Vol. 10, No. 2; 1981-82).

CHRONICLE SURVEY

Applications for 1983 Freshman Class Down 1 Pct. from Last Year

A majority of private colleges and universities had received more freshman applications by January 31 of this year than on the same date a year ago, according to a new Chronicle Survey. However, the number of applications was down at a majority of public institutions.

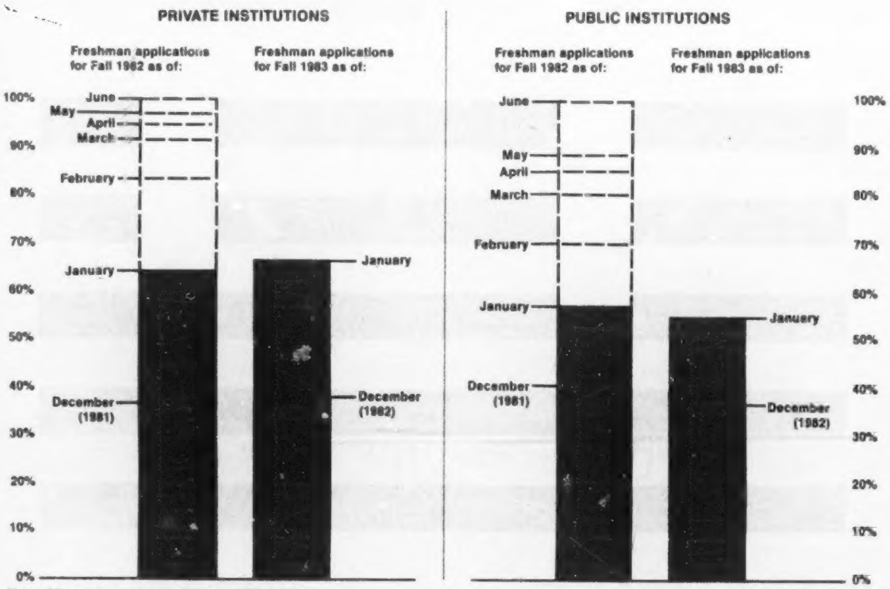
The survey found that 54.4 per cent of private colleges and universities had more applications for next fall's freshman class, while 54.9 per cent of public institutions had fewer applications.

For all institutions, public and private, the number of applications was down by 1 per cent at the end of January, compared with a year ago.

Private institutions with from 500 to 1,000 students experienced the largest increase—6 per cent—in the number of freshman applications. Public institutions with from 2,500 to 5,000 reported the largest decrease—19 per cent.

The only public institutions that reported an increase, the survey found, were those with from 10,000 to 20,000 students. Their applications were up by 2.3 per cent over last year.

The survey of freshman applications was conducted for *The Chronicle* by John Minter Associates, a higher-education research organization in Boulder Colo.



Note: All percentages are of June, 1982, total

CHRONICLE CHART BY PETER H. STAFFORD

Changes in Number of Freshman Applicants

January 31, 1983, compared with January 31, 1982

	Per cent change in average (a)	Per cent reporting increase	Per cent reporting decrease	Per cent change: Low (b)	Per cent change: Median (c)	Per cent change: High (d)
Private colleges and universities						
Research and Ph.D.-granting	− 1.3%	34.8%	65.2%	− 8.1%	− 3.5%	+ 4.6%
Comprehensive	+ 2.5%	58.3%	41.7%	− 8.0%	+ 1.5%	+ 7.6%
Liberal arts	+ 0.9%	55.5%	42.2%	−10.0%	+ 3.4%	+19.2%
Regions						
Northeast and Mid-Atlantic	− 0.1%	55.0%	45.0%	− 8.0%	+ 0.4%	+ 8.3%
Great Lakes and Plains	− 0.3%	51.3%	46.2%	− 9.3%	+ 1.2%	+11.3%
Southeast	+ 1.3%	59.4%	40.6%	−15.1%	+ 7.6%	+19.9%
West and Southwest	+ 3.1%	54.5%	42.4%	−10.7%	+ 4.1%	+ 9.9%
Enrollment						
500 − 999	+ 6.0%	49.0%	44.9%	−12.6%	0.0%	+24.0%
1,000 − 2,499	− 0.2%	54.9%	45.1%	−10.2%	+ 1.2%	+12.1%
2,500 − 4,999	+ 2.6%	63.6%	36.4%	− 6.7%	+ 3.1%	+ 8.0%
5,000 − 9,999	− 1.4%	50.0%	50.0%	−10.0%	− 2.2%	+10.7%
10,000 and over	+ 0.3%	41.7%	58.3%	− 7.0%	− 2.8%	+ 4.0%
All private institutions	**+ 1.0%**	**54.4%**	**43.8%**	**− 8.8%**	**+ 1.6%**	**+12.0%**
Public colleges and universities						
Research and Ph.D.-granting	− 0.4%	47.5%	52.5%	− 7.1%	− 0.4%	+12.3%
Comprehensive	− 6.2%	42.6%	55.7%	−13.8%	− 2.6%	+12.4%
Regions						
Northeast and Mid-Atlantic	− 4.4%	54.5%	40.9%	−13.2%	+ 0.7%	+17.2%
Great Lakes and Plains	− 1.3%	39.1%	60.9%	− 9.3%	− 2.8%	+ 6.2%
Southeast	+ 3.7%	51.6%	48.4%	− 6.1%	+ 0.1%	+21.1%
West and Southwest	− 4.5%	37.5%	62.5%	−13.7%	− 5.4%	+ 7.2%
Enrollment						
500 − 2,499	− 4.0%	55.6%	44.4%	−11.0%	+ 4.2%	+18.8%
2,500 − 4,999	−19.0%	42.9%	57.1%	−21.3%	− 8.8%	+ 2.3%
5,000 − 9,999	− 5.9%	39.1%	56.5%	−14.6%	− 2.0%	+13.4%
10,000 −19,999	+ 2.3%	50.0%	50.0%	− 7.3%	− 1.4%	+12.3%
20,000 and over	− 1.9%	41.0%	59.0%	− 7.1%	− 1.0%	+ 9.1%
All public institutions	**− 4.8%**	**43.8%**	**54.9%**	**−10.6%**	**− 1.3%**	**+12.6%**
All institutions	**− 1.0%**	**50.7%**	**47.7%**	**− 9.2%**	**+ 0.2%**	**+12.3%**

(a) Percentage change in mean number of applications by January 31, 1983, compared with the mean for a year earlier.
(b) The bottom one-fourth of the institutions reported changes smaller than the percentage shown.
(c) Half of the institutions reported changes greater than the percentage shown.
(d) The top one-fourth of the institutions reported changes greater than the percentage shown.
Note: Survey data are from a stratified random sample of 230 four-year colleges and universities, excluding those with enrollment under 500.

SOURCE: SURVEY FOR THE CHRONICLE BY JOHN MINTER ASSOCIATES

Graduate Schools

Continued from Page 1

had left graduate school before completing their doctoral dissertations.

Gail Gere, director of graduate admissions at Rensselaer Polytechnic Institute, where applications were up 20.2 per cent at the end of February, said, "Our seniors are definitely concerned about their job possibilities."

However, Ms. Gere added, seniors in engineering and computer science also have been considering graduate school because they have begun to realize that undergraduate education simply does not cover enough ground to keep them conversant with their rapidly evolving fields.

Applications to Rensselaer's graduate programs in computer science were up 53.2 per cent over February, 1982, she said.

Several graduate-school officials said they had expected the growth in high-technology fields, but were surprised by the renewed interest in the humanities and physical sciences. Among the increases in the latter fields:

▶ At the University of Chicago, graduate applications by the middle of March were up 10 per cent in the humanities and up 14 per cent in the physical sciences.

▶ At Cornell University, increases in the number of applicants to programs in the humanities and physical sciences accounted for much of a total increase of 8 per cent by the end of February. Alison P. Casarett, dean of the graduate school, said that applications in the humanities rose from 737 last year to 855 by the end of February this year.

▶ Applications to the graduate school of arts and sciences at Bryn Mawr College were up 11 per cent over a year ago.

▶ At the University of Michigan at Ann Arbor, where total applications this year were about the same as last year, applications to programs in the humanities were up. "Our recent drop-off in the humanities has now disappeared," said Byron Grosebeck, associate dean of the graduate school.

'Extra Arrow in Their Quiver'

Ms. Casarett said many new college graduates in the humanities were applying to graduate school because of the poor job market.

"I think the kids aren't getting jobs," she said. "They want to be competitive, and they think that this is the extra arrow in their quiver that will make them competitive."

However, several graduate-school officials have also speculated that students interested in academic careers in the humanities have begun looking beyond the immediate job shortage in higher education and are planning for a time when the academic job market is expected to improve.

"Since it normally takes six or seven years to earn a Ph.D., I suspect that some of these applicants are looking to the early 1990's, when the market should be pretty decent," said Mr. Grosebeck of the University of Michigan.

And F. Gregory Campbell, a special assistant to the president at the University of Chicago, noted, "There are a number of people who think that by the time this group of students completes graduate education, the academic job market will require more Ph.D.s."

Increase May Fade Later

Graduate-school officials stress that the evidence for the increase is anecdotal. They won't know how significant the rise is until all the applications are in and until they see how many of the students who are offered admission actually enroll.

"It may well be that applications are higher now than in years past, but they may fall off when the process is completed," said Richard D. Fulton, dean-in-residence at the Council of Graduate Schools.

While most graduate schools encourage students to apply early, many of them will accept applications well into the spring.

Mr. Fulton said there were at least two factors that could make the increase in applications seem bigger than it actually is:

▶ Students may be applying earlier than usual because they want to get an early start on finding scarce financial aid. At Cornell, for instance, applications were running more than 12 per cent ahead of last year at the end of January, and about 8 per cent ahead at the end of February.

▶ For the same reason, individual students may be applying to a larger number of graduate schools. Several deans said they had heard speculation about such "shotgun applications," but added that they did not know yet how widespread the phenomenon was.

Mr. Kunze of Texas A&M said that if the increases in applications to graduate engineering programs hold up over the next several years, the present shortage of highly qualified faculty members in those areas could be alleviated.

"There has been an enormous effort by the National Science Foundation and other agencies to encourage engineers to go on to graduate school," said G. Philip Manire, dean of the graduate school at the University of North Carolina at Chapel Hill. "Maybe that effort is beginning to pay off."

Shortage of Agriculture Scientists Found

WASHINGTON

Steadily declining enrollments in agricultural colleges have begun to produce shortages of trained scientists, nutritionists, and other professionals in agriculture-related fields, according to the U.S. Department of Agriculture.

Terry B. Kinney, Jr., administrator of the department's Agricultural Research Service, said that between now and 1985 the country will need nearly 60,000 graduates annually from baccalaureate programs in agriculture.

Despite those opportunities for employment, he said, a recent study supported by his agency estimated that only 51,976 graduates will be produced each year.

The Agriculture Department estimated that the problem would be compounded in the next decade, because the number of high-school graduates will decrease by 25 per cent from 1978 to 1991.

David J. Mugler, associate dean of agriculture at Kansas State University, who conducted the survey of agriculture enrollments on which the U.S.D.A. based its estimates, said undergraduate enrollment in agriculture had dropped 15 per cent in the last five years. —KIM McDONALD

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News Summary

Articles on inside pages

College and university officials are worried about the widespread dissemination of information that relates to betting on intercollegiate games. Story on Page 17.

The president of the Public Broadcasting Service termed a "national disgrace" a proposal to turn over to commercial users television frequencies now reserved for educational purposes. Story on Page 3.

Microcomputers may replace books as the principal device by which students learn, some educators are predicting. Story on Page 9.

Contributions that most colleges make to pension plans will continue to be exempt from Social Security taxes. Story on Page 13.

The Supreme Court has been asked to decide whether pension plans can legally differentiate between male and female retirees. Story on Page 21.

Professors in such high-demand fields as business and engineering receive higher salaries than their colleagues in other disciplines. Story on Page 21.

Military history is more than just "kings and battles," as a recent book by William McNeill demonstrates. Story on Page 25.

A report commissioned by underground leaders of Poland's outlawed trade union, Solidarity, documents widespread repression of academics and college students in that country. Story on Page 19.

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$50-Million Asked to Reverse Decline in Soviet Studies

By MALCOLM G. SCULLY

WASHINGTON

Congress has been asked to spend $50-million to reverse what many scholars and government officials have described as a dangerous decline in the quality and the quantity of American scholarship on the Soviet Union.

"Bit by bit, the apparatus that was built up after the Second World War to give us our national capability for expert knowledge and analysis of the U.S.S.R. and Eastern Europe is coming apart," said Vladimir I. Toumanoff, executive director of the National Council for Soviet and East European Research.

Mr. Toumanoff, whose council was established in 1978 to develop and sustain basic research on the Eastern bloc countries, was testifying in favor of the "Soviet-Eastern European Research and Training Act of 1983," HR 601, introduced by Rep. Lee H. Hamilton, Democrat of Indiana, and Rep. Paul Simon, Democrat of Illinois.

The Senate version, S 873, was introduced by 10 members, including Sen. Richard Lugar, Republican of Indiana, who said the legislation was especially needed because "traditional sources of support for Soviet studies—namely the universities and foundations—are hard-pressed to meet numerous other demands

Continued on Page 8, Column 1

5 Student and Faculty Groups Call on Universities to Curb Disruptions of Speeches

Heckling at Berkeley, Kansas State, Minnesota cited

By PAUL DESRUISSEAUX

WASHINGTON

In the wake of recent disturbances on college campuses that resulted in the cancellation or curtailment of speeches by public figures, several national organizations that represent faculty members, students, and administrators have issued a joint statement urging all campuses in the United States to take steps to insure that the "hecklers' veto" does not stifle freedom of speech.

"The 'hiss and boo,' when they go beyond brief expressions of opposition and become instruments to silence those with whom one disagrees, are inappropriate at any public gathering, but especially in places of higher learning," said the statement. "It pains us to acknowledge that any of our campuses, even for brief periods, have not been open to free speech and reasoned debate."

The statement—called "Invited Speakers and Academic Freedom: A Call to Action"—was endorsed by the American Association of University Professors, the American Council on Education, and three student groups: the National Coalition of Independent College and University Students, the National Organization of Black University and College Students, and the United States Student Association.

According to the statement, the obligation of academic institutions to insure free speech on their campuses is all the more apparent "when attempts to suppress this freedom come from members of our own ranks."

Among the incidents that prompted the organizations to issue the statement were disruptions of campus lectures by Jeane J. Kirkpatrick, U.S. Ambassador to the United Nations; Eldridge Cleaver, former leader of the Black Panther Party; and Sheik Ahmed Zaki Yamani, the oil minister of Saudi Arabia.

Last week protesters shouted down Mr. Yamani from the rear of a crowded auditorium at Kansas State University before he started speaking. When the protests began, the oil minister left the stage while the

Continued on Page 10, Column 4

The texts of two statements issued last week on the heckling of campus speakers appear on Page 11.

Campuses Trying to Control Religious Cults

By LAWRENCE BIEMILLER

Gregory S. Blimling, dean of students at Louisiana State University, remembers a telephone call from a man who said his daughter, an L.S.U. student, had joined a religious cult on the campus.

"He wanted help and the support of the university in getting his daughter kidnaped," Mr. Blimling says. "I told him we couldn't condone that kind of activity, and recommended that he get a lawyer."

That phone call five years ago stirred his concern about cults and the nature of their activities on the L.S.U. campus, Mr. Blimling says. Now he calls cults "an increasing problem."

Louisiana State, he says, has had representatives of several cults on its campus at different times, including the Rev. Sun Myung Moon's Unification Church, The Way International, and the International Society for Krishna Consciousness, whose members are usually known as Hare Krishnas.

"One of the difficulties is finding out how many students this is happening to," Mr. Blimling says. "Once they become involved, they often pick up and leave the university without saying why." Such departures, he says, are lost in the university's overall attrition rate.

Resurgence and Decline

Mr. Blimling is one of many administrators who agree that religious cults have found college campuses to be among their more profitable recruiting grounds in recent years.

But, they say, cult representatives do not seem to have been successful in meeting their membership goals, which in some cases are set for them by their superiors in other cities. Nor do many of the student organizations that the cult recruiters establish—so as to be able to take advantage of campus services and facilities—seem to last long: When recruiters detailed to one campus by a religious cult leave to work elsewhere, the student groups they led frequently become dormant.

The result is an uneven pattern of resurgence and decline among the cults' organizations on individual campuses—a pattern that makes it difficult for student-affairs administrators to keep track of cults operating at their own colleges, often under names that give no clue to the groups' activities or affiliations.

Many campus administrators, especially those who work closely with students, say that cult representatives, in their efforts to attract and retain members, employ deceit, harassment, and sophisticated mind-control techniques.

Such charges are routinely denied by cult spokesmen, who protest that their theologies have become the target of discrimination by supporters of established religions and that their political ideologies, often stridently conservative, earn them the animosity of liberals.

In 1982, says Mr. Blim-

Continued on Page 6

> **"You feel that you are a person chosen by God to be involved in a historic mission to save the world or to save mankind. And after you start to accept that, anything goes." —Gilbert Alexander**

An interview with a campus cult organizer, Page 6

FACT-FILE

Colleges and Universities Among the Top 500 Defense Department Contractors, 1982

	Amount of contracts (add 000)	Rank in top 500
Johns Hopkins University	$235,517	13
Massachusetts Inst. of Technology	216,562	18
Illinois Institute of Technology	44,418	43
University of California	35,345	52
Georgia Institute of Technology Research Institute	26,689	63
Stanford University	22,783	73
University of Texas	15,720	86
University of Dayton	13,505	90
Pennsylvania State University	12,254	93
New Mexico State University	11,745	96
University of Washington	10,388	104
Carnegie-Mellon University	10,028	107
University of Southern California	9,854	110
Utah State University	9,431	113
University of Illinois	8,957	118
University of Maryland	7,237	142
University of Rochester	6,976	148
University of New Mexico	6,566	152
Columbia University	5,468	164
California Institute of Technology	5,355	165
Cornell University	4,872	173
Ohio State U. Research Foundation	4,674	177
University of Wisconsin	4,611	179
Yale University	4,204	182
University of Michigan	4,095	184
University of Pennsylvania	3,790	194
Georgia Institute of Technology	3,789	195
Oregon State University	3,485	208
University of Arizona	3,450	209
University of Massachusetts	3,433	210
Virginia Poly. Institute & State U.	3,389	213
Princeton University	2,855	229
Boston College	2,811	231
Florida State University	2,786	232
University of Miami	2,752	236
Oklahoma State University	2,746	237
George Washington University	2,736	238
Harvard University	2,736	239
Boston University	2,702	241
University of Denver	2,635	247
University of Minnesota	2,459	258
Purdue U. Research Foundation	2,430	260
University of Utah	2,387	264
New York State U. Research Foundation	2,314	271
Rensselaer Polytechnic Institute	$2,305	272
University of Hawaii	2,214	276
Texas A&M U. Research Foundation	2,153	279
University of Florida	2,143	280
University of Colorado	2,073	283
Lehigh University	2,034	286
University of Rhode Island	2,018	287
Brown University	1,942	294
Northeastern University	1,920	296
Northwestern University	1,916	297
New York University	1,896	299
University of Pittsburgh	1,817	308
Colorado State University	1,806	310
Case Western Reserve University	1,744	315
Georgetown University	1,730	317
North Carolina State University	1,718	319
University of Iowa	1,703	320
University of North Carolina	1,676	325
New York Polytechnic Institute	1,626	328
Michigan State University	1,619	331
University of Tennessee	1,531	345
Texas Technical University	1,508	347
Stevens Institute of Technology	1,469	358
University of Virginia	1,415	364
Duke University	1,390	368
Wentworth Inst. of Technology	1,387	369
New Mexico Institute of Mining and Technology	1,340	374
University of Kansas	1,287	380
Clemson University	1,273	384
University of Connecticut	1,241	389
Michigan Technological University	1,231	391
Drexel University	1,230	393
University of Central Florida	1,132	409
Louisiana State University	1,070	424
Rutgers University	1,024	429
Syracuse University	1,003	437
Howard University	982	441
University of Missouri	963	448
Washington State University	957	449
Emmanuel College (Mass.)	955	450
University of Alabama	917	466
Arizona State University	852	482
Washington University (Mo.)	849	483

SOURCE: U.S. DEPARTMENT OF DEFENSE

Scientific Advisers to Interior Department Screened by Republican Party Officials

WASHINGTON

Scientists who advised the Interior Department on the environmental impacts of offshore development say they were annoyed to learn that officials of the Republican National Committee had screened them before the department decided whether to extend their terms on an advisory panel.

"None of our discussions had a damn thing to do with politics," said Jack Anderson, a marine biologist who served for two years on the department's Outer Continental Shelf Advisory Board.

Mr. Anderson, who works in Sequim, Wash., for the Battelle Memorial Institute, was among 14 scientists reviewed early last year by the Republican National Committee at the request of Derrell P. Thompson, a special assistant to Interior Secretary James G. Watt.

The committee recommendations were contained in a memo obtained by Sen. Dale L. Bumpers, Democrat of Arkansas. Secretary Watt did not appoint to the board 10 of the 14 scientists, including Mr. Anderson, beside whose names the committee had written No. Those not appointed included James K. Mitchell, a professor of geography at Rutgers University, and Donald Boesch, executive director of the Louisiana Universities Marine Consortium, both former members of the panel.

Mr. Mitchell, who served as chairman of the panel for two years until December, 1981, said Interior Department officials originally expressed an interest in extending the terms of the members of his board. But "basically nothing" happened, said Mr. Anderson, after the members said they were interested in staying on the board.

'Particularly Offensive'

An aide to Senator Bumpers has asked Interior Department officials to release any additional documents they used to solicit information about scientists on the agency's 140 advisory panels.

"This practice is offensive enough for any advisory committee," the aide said. "But Mr. Bumpers considers it particularly offensive for a scientific advisory committee."

An Interior Department spokesman acknowledged that Secretary Watt had directed agency officials to ask the Republican National Committee, special-interest groups, and the National Academy of Sciences to review scientists before they were named to advisory committees.

"He wants to pick the best people to advise the agency," the spokesman said.

The release of the Interior Department memo, which revealed that agency officials had consulted political groups before appointing scientists to advisory panels, follows recent allegations that the Environmental Protection Agency used "hit lists" from conservative groups to rid its advisory panels of scientists with particular political or environmental viewpoints.

Last year Agriculture Secretary John R. Block stopped officials in his department from continuing political checks on scientists who reviewed research grant applications submitted to the agency after some of the scientists learned of the practice and complained about it.

Sen. Lowell P. Weicker, Republican of Connecticut, who chairs the Senate Subcommittee on Energy Conservation and Supply, plans to hold hearings to investigate how the Interior Department selected scientists for its advisory panels.

—KIM McDONALD

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'In' Box

A hefty boost in retirement benefits is expected to begin next month for those receiving annuity payments from the College Retirement Equities Fund. The projected increase stems from the strong performance of the stock market in recent months.

Officials of the pension company have not yet determined the exact amount of the increase, but it will probably be 30 per cent to 40 per cent, said William T. Slater, a senior vice-president of both C.R.E.F. and the Teachers Insurance and Annuity Association.

Each April the pension company recalculates the monthly payments it will make to annuitants over the next year, based primarily on the performance of C.R.E.F.'s investments in common stocks during the fiscal year ending March 31.

The market surge that is benefiting current retirees also means that premium payments for educators not yet retired are purchasing fewer "accumulation units" in C.R.E.F.'s portfolio, Mr. Slater noted. Benefits ultimately paid to those people will be affected by stock performance in their retirement years.

◆

An organization of photocopying outlets is reportedly planning a counteroffensive against publishers that have sued New York University and nine of its faculty members for copyright infringement. The case is pending in a federal district court.

Kinko's Graphics, a national chain of copy shops, says in a press release that a new committee of the National Association of Quick Printers will fight "the campaign of intimidation" by the Association of American Publishers.

Paul J. Orfalea, president of Kinko's and head of the new committee, said he had scheduled a strategy session in Washington April 18 with representatives of the American Association of University Professors and other interested parties.

◆

A combination of tight budgets and spiraling travel costs could make attending professional conventions prohibitive for many faculty members, according to three economics professors at Memphis State University.

Writing in the *Eastern Economic Journal*, the economists note that between 1970 and 1980 air fares increased almost 135 per cent, while the price of out-of-town lodgings increased almost 125 per cent. During that time, they say, faculty salaries declined about 18 per cent after adjustments for inflation.

The authors—Howard P. Tuckman, Barbara H. Tuckman, and Thomas O. Depperschmidt—note that departmental subsidies usually cover only a small portion of a faculty member's expenses for conventions.

In a 1980 survey of 158 economics departments, the authors found that the subsidy averaged $85.50 and that about three-fourths of the departments either had not increased their travel budgets in the past year or had actually reduced them.

Personal & Professional

Employers Should Bear Legal Responsibility for Unequal Pensions, Supreme Court Told

By JANET HOOK

WASHINGTON

Employers who offer retirement plans that pay lower pension benefits to women than to men are violating federal civil-rights law and should not be allowed to shift the blame to the insurance companies that they select to operate annuity programs, the Supreme Court was told last week.

Hearing arguments in a case challenging a deferred-compensation program offered to employees of the Arizona state government, the Court was asked to rule that pension plans cannot legally differentiate between male and female retirees simply because women as a group live longer than men.

Nathalie Norris, a state employee, contended that Arizona's retirement program illegally discriminated on the basis of sex because it included a life-annuity option that would pay her some $30 a month less than would be received by a male retiree who had made equal contributions to the system.

Implications for TIAA-CREF

Arizona's lawyer told the Court that the state should not be blamed for the practices of private insurance companies that use separate life-expectancy tables to calculate benefits for men and women. The sex-based actuarial tables, widely used in the insurance industry, result in lower monthly annuities for women because the average woman is expected to collect benefits over a longer period than is the average man.

The Court's ruling in the case could have broad implications for colleges and universities—particularly the approximately 1,500 institutions with pension plans offered by the Teachers Insurance and Annuity Association and the College Retirement Equities Fund, which also use sex-based actuarial tables.

The Justices have not yet said whether they will hear two cases involving challenges to T.I.A.A.-C.R.E.F. plans at Long Island and Wayne State Universities. In those cases, which have been appealed to the Supreme Court, the U.S. Courts of Appeal for the Second and Sixth Circuits split on the issue of whether the use of sex-based actuarial tables violates Title VII of the Civil Rights Act of 1964, which bars sex discrimination in employment.

Court May Delay Action

Some lawyers believe the Court may delay any action on those lawsuits until it decides the Norris case, *Arizona Governing Committee for Tax Deferred Annuity and Deferred Compensation Plans* v. *Norris* (Case No. 82-52).

Amy Jo Gittler, Ms. Norris's lawyer, told the Court that Arizona had violated Title VII's ban on discrimination in fringe benefits by offering an annuity plan that used sex-based actuarial tables. Although women as a group live longer than men, she said, many individual women will not outlive their male counterparts.

Retirement plans "cannot be based on statistics," Ms. Gittler said. "Title VII requires us to treat individuals as individuals, not as group statistics."

Responding to a question from Chief Justice Warren E. Burger, Ms. Gittler said the widespread practice of charging women lower life-insurance premiums because they are expected to live longer would also violate Title VII if the insurance plan were sponsored by an employer.

Arguing in Arizona's defense, John L. Endicott told the Court that the state could not avoid choosing an annuity that differentiates between men and women because all the private plans available used sex-based actuarial tables. "Employers are not responsible for the fact that the open market treats women differently than men," said Mr. Endicott. Ms. Norris's complaint "is not with anything Arizona has done as an employer but with an insurance-indus-

WIDE WORLD

Natalie Norris has sued Arizona over a retirement plan that provides lower benefits to women than to men.

Continued on Following Page

Why Some Professors Earn More than Others: It's a Classic Case of Supply and Demand

By SUZANNE PERRY

What is the market value of a professor these days?

That question has become increasingly important to colleges and universities as they compete with each other, and with industry, for faculty members in such high-demand fields as business, engineering, and computer science.

Further, market factors have led to major—and in some cases widening—salary gaps among disciplines. At some universities, the gaps exist even among teaching assistants.

Many administrators and faculty members say they accept market influences on salaries as a fact of life. But some of them warn that if the trend accelerates, it could lead to friction among faculty members.

"It's getting out of hand," says Paul Strohm, who, as chairman of the English department at Indiana University, hires faculty members at the lower end of the pay scale.

"Faculty members have always accommodated themselves to some kind of discrepancies," adds Mr. Strohm, who is first vice-president of the American Association of University Professors. "But these exaggerated discrepancies within institutions do create problems with collegiality."

50 Pct. More for Business

He concedes that most faculty members have not yet perceived salary gaps between disciplines as an issue, but he says that could be because their "consciousness has not caught up to the extremity of the imbalance."

Oklahoma State University recently published the results of its ninth annual survey of faculty salaries at institutions that are members of the National Association of State Universities and Land-Grant Colleges. (See table, Page 24.) The survey determined the average salaries this year at 73 institutions—by geographic region, by faculty rank, by discipline, and by fields within disciplines.

According to the survey, new assistant professors of business and management earn an average salary of $28,319. That is 50 per cent more than the $18,858 average salary their counterparts in letters are getting.

Last year, the survey showed, the gap between business and letters was about 45 per cent.

Other high-paying fields for new assistant professors in this year's survey are law, $31,738; engineering, $27,429; health professions, $26,610, and computer and information sciences, $26,233. Among the disciplines with comparatively low aver-

Continued on Page 24, Column 1

Salaries

Continued from Page 21

age salaries are foreign languages, $18,257; fine and applied arts, $18,773; area studies, $18,833, and psychology, $18,874.

Similar differences were found in a survey of 1981-82 salaries at 204 state colleges and universities, the results of which were published last fall. It was conducted by the College and University Personnel Association for the American Association of State Colleges and Universities.

According to that survey, new assistant professors in business and management earned average salaries of $22,972, while those in foreign languages earned $17,083.

Allan W. Ostar, president of A.A.S.C.U., says his association compiled the salary data for the first time last year because its members had expressed a desire for more market information.

"Whether we like it or not, there's growing [salary] differentiation," he says. "I wouldn't say anybody's happy about it because in education we don't like to place relative values on one discipline over another."

'Sorry, Class Is Filled'

But colleges have no choice, Mr. Ostar says. "We have to deal with the immediate problem. We have qualified students who want to take a course in computer science, and we have to tell them we're sorry, the class is filled," he says.

At least one dean worries about what will happen if market conditions create surpluses of faculty members where shortages exist now.

"You're going to have problems," says John P. Dolly, dean of the college of education at the University of Wyoming. "You'll be staffed with a bunch of people with outrageously high salaries."

"I think eventually faculty members are going to start pointing at them and saying, 'Hey, we want those salaries, too.' "

Tensions in Montana

At the University of Montana, differences in salaries have already created tension among some faculty members. In December, 1981, the English department protested a plan to make salary adjustments in certain "critical" disciplines with special funds allocated by the state legislature.

The disciplines were business, chemistry, computer science, geology, economics, mathematics, law, and pharmacy.

Merrel D. Clubb, Jr., chairman of the English department, says he and his colleagues recognized that market problems existed in some fields, but they objected to the concept of awarding increases to an entire discipline, regardless of the merit of individual faculty members.

In a letter to the university president that it distributed to all faculty members, the English department noted that people in the "critical" departments "often realize sizeable amounts of added income from consulting and other activities associated with their disciplines.

"They are able to do this because they are benefiting from the name of the university in a way they could not if they were not associated with the university."

On other campuses, however, the question of disciplinary salary differentials has been overshadowed by more pressing economic concerns.

Pay gaps are a "sore point," says Robert J. Korbach, associate professor of economics at the University of North Dakota and a member of the A.A.U.P. compensation committee there. But he says faculty members at North Dakota are devoting their efforts to persuading their financially troubled state to improve faculty salaries in general.

"You don't maintain solidarity if you allow fiefdoms to tear you apart," he says. "There's not enough pie to go around."

Administrators at the University of North Dakota, like many others who use the Oklahoma State salary survey, are primarily interested in how salaries at their university compare with those at other institutions in their region. Alice T. Clark, vice-president for academic affairs, says the university showed up poorly in the most recent survey.

Administrators at North Dakota will use the data, as they have before, in budget presentations to the state legislature, she says. But not all legislators are receptive to comparative salary figures, she adds.

She says their attitude is: "We don't care what happens in the rest of the world. This is North Dakota."

Faculty Salaries by Discipline Group

1982-83 averages at 73 state universities and land-grant colleges

	Professor	Associate professor	Assistant professor	New assistant professor *	Instructor	All ranks
Agriculture and natural resources	$34,743	$27,509	$23,183	$23,103	$17,277	$29,723
Architecture and environmental design	36,321	28,551	22,887	21,100	19,545	29,329
Area studies	35,323	26,445	21,169	18,833	18,173	28,757
Biological sciences	37,698	28,271	23,679	22,305	17,985	31,658
Business and management	41,647	32,844	28,304	28,319	20,372	33,841
Communications	35,139	27,241	22,143	21,155	17,345	27,127
Computer and information sciences	41,791	32,286	27,739	26,233	21,118	32,834
Education	34,912	27,314	21,828	20,776	18,018	27,998
Engineering	40,619	31,534	27,644	27,429	19,747	34,827
Fine and applied arts	33,036	25,232	20,023	18,773	16,578	26,203
Foreign languages	36,165	26,142	20,607	18,257	17,670	27,288
Health professions	41,913	32,007	26,236	26,610	20,686	31,401
Home economics	35,617	27,615	22,557	22,522	17,888	25,990
Interdisciplinary studies	37,373	26,946	21,167	21,316	18,515	27,890
Law	50,447	37,157	33,282	31,738	23,619	45,123
Letters	35,824	25,987	20,385	18,858	15,826	27,020
Library science	37,268	29,066	23,226	21,945	19,746	30,309
Mathematics	38,390	28,045	22,269	21,453	17,019	30,757
Physical sciences	38,826	28,381	23,130	22,208	18,343	33,422
Psychology	37,718	27,169	20,983	18,874	19,371	30,505
Public affairs and services	38,092	29,612	23,530	22,301	19,612	29,856
Social sciences	37,498	27,394	21,763	20,643	18,729	30,070
Technical and occupational curriculums	36,002	—	23,271	18,351	18,392	25,221
All disciplines	$38,126	$28,550	$23,677	$22,991	$18,597	$30,631

* Includes only those hired for the first time in the fall of 1982.
— Data not available.

SOURCE: OFFICE OF INSTITUTIONAL RESEARCH
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News Summary

Articles on inside pages

Major demonstrations will be staged at four primate-research centers to protest alleged abuses of laboratory animals. Story on Page 3.

The University of Utah, site of the first successful implant of a plastic heart, is becoming a leader in other areas of scientific and biomedical research, as well. Story on Page 4.

The Navy and the University of Rochester are caught in a dispute over who should name the president of the Center for Naval Analysis. Story on Page 9.

The Supreme Court has ruled that employees charging job bias need not offer proof of an intention to discriminate. Story on Page 9.

Harvard University is investigating an alleged case of scientific fraud involving arthritis research performed at one of its affiliated hospitals. Story on Page 11.

Experiments with the three-point goal and the "shot clock" in college basketball will continue. Story on Page 15.

Lecturing skills, though not a priority for many professors, are easily improved. Story on Page 19.

Elie Wiesel, who has spent most of his life witnessing to the horrors of the Holocaust, is the author of one recently published book and the subject of another. Story on Page 21.

China has canceled all cultural and sports exchanges with the United States in response to an American decision to grant asylum to a Chinese tennis player. Story on Page 17.

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Higher Education Now Big Business for Big Business

By BEVERLY T. WATKINS

Higher education has become big business for big business.

As corporations have assumed greater responsibility for the education of their employees, they have begun to establish their own colleges and universities. About 400 business sites now include a building labeled "college," "university," "institute," or "education center," according to industry estimates.

Many corporate educational institutions offer the same range of courses available at traditional colleges. However, company programs are more likely to use a different format, such as the "short course" or "self-paced module."

Some of the company colleges admit students who are not employees.

Recently, a few have begun to offer traditional graduate programs. They have received approval from state education agencies—and, in some cases, regional accrediting agencies—to offer advanced academic degrees.

As a group, the institutions cover a wide spectrum of the corporate world and provide education and training for millions of people. Some examples:

▶ The Bell System Center for Technical Education, the American Telephone and Telegraph Company's national management-training center in Illinois, offers programs to about 30,000 students each year, not all of them Bell employees. Since the residential campus was established in 1968, it has provided programs ranging in length from three days to four weeks for 250,000 students from the system's 23 operating, research, and manufacturing companies. The center has a staff of 500 administrators, faculty members, and curriculum specialists. In 1980 A.T.&T. spent about $1.7-billion for employee education at the center and other locations.

▶ NCR Corporation, a manufacturer of information-processing systems for business, offers instruction to more than 100,000 employees a year at its Corporate Education Center in Ohio, at other sites in the United States, and at locations in 120 other countries. The corporation, which was formerly called the National Cash Register Company, maintains the Computer Science Institute for engineers, sales staff members, and other professional personnel, and the Management College and Career Development Center for corporate executives. About 800 instructors teach the education center's 650 courses.

▶ Arthur D. Little's Management Education Institute, a subsidiary of the management-consulting firm, has 57 students this year in a program leading to a master's degree in the science of management. Since it was established in 1971, it has awarded 674 such degrees to students from 49 countries. Students pay $11,000 for an 11-month program that includes courses in economics and industrial development, in-

Continued on Page 6, Column 1

U.S. Tells Colleges Not to Force Students to Show Draft Papers

By JANET HOOK

WASHINGTON

Colleges should not require students to disclose whether or not they have registered for the draft when they apply for federal grants and loans, the Education Department says.

The agency set that policy in light of a court order temporarily barring the enforcement of a new law linking draft registration and eligibility for federal aid.

Moving to clear up confusion about the application of an injunction issued last month in Minnesota, Education Department officials last week were preparing to send an advisory letter to colleges based on a conclusion by government lawyers that the order affects colleges and universities nationwide.

Judge Donald D. Alsop of the U.S. District Court for Minnesota issued the injunction, pending the outcome of a case before him that challenges the constitutionality of the law barring draft-age men from receiving federal financial aid if they have failed to register with the Selective Service.

Since the injunction was issued, questions have been raised about whether the ban meant that colleges should not even continue to prepare to administer the new law.

The registration requirement applies to grants and loans made for college terms beginning after June 30. Many colleges are now accepting financial-aid applications for the summer and fall terms.

To avoid delays later this year, some institutions have already begun asking students to sign forms certifying that they have registered for the draft or stating why they are not required to do so. The Education Department itself has already sent out some 1.4 million forms to Pell Grant applicants that include questions about the students' draft-registration status.

Question of Contempt

Lawyers for the Minnesota students who filed the suit against the registration requirement have contended that requiring students to fill out those forms violates Judge Alsop's injunction.

Fearing that the government might be found in contempt of court, Justice Department lawyers have concluded that colleges should be told they cannot compel students to fill out the part of the aid application referring to their registration status, said James W. Moore, director of student-aid programs in the Education Department.

Students may voluntarily provide the information, Mr. Moore said. But colleges should not delay processing the applications of those who choose not to do so. The letter being prepared last week by the Education Department also advises colleges to provide students with full information about the status of the registration requirement.

Put Education at Top of U.S. Agenda, 51 Leaders Urge

NEW YORK

In an attempt to get education back on the government's priority list, 51 leaders in higher education, science, government, industry, labor, and philanthropy have joined in recommending federal action to meet the "educational needs of a new American economy heavily based on science and technology."

Their statement of those needs and a set of general guidelines for federal legislation, announced here last week, grew out of a conference of the leaders called by Gov. James B. Hunt, Jr., of North Carolina and David A. Hamburg, president of the Carnegie Corporation of New York.

"Education must move to the top of the national agenda if the nation is to prosper," said the statement drawn up at the conference.

The conferees, in calling for "dramatic improvement" in the country's entire educational system, urged a national effort comparable to that inspired by the Soviet Union's launching of the first space satellite in 1957.

'Powerful Lever for Reform'

"The economic challenge from Japan and other countries is the modern sputnik," the conference statement said, "a powerful lever for the reform and support of education.

"Indeed, the conference concluded that the present economic challenge is more profound than sputnik and as fundamental as the change from an agrarian to an industrial economy after the Civil War."

The conferees emphasized that they were calling for a program much broader than an expansion of graduate enrollment in science and engineering.

"A crash program to produce more scientists and engineers without attention to the general population is shortsighted," the statement said. "General scientific literacy for citizenship is just as important to the future of the nation as the production of high-level experts.

"But concentration on the former to the

Continued on Page 6, Column 1

College Republicans Assail Use of Student Fees to Back Activists

New GOP campaign aims at ending compulsory financing for campus-based public-interest research groups

WASHINGTON

"To compel a man to furnish funds for the propagation of ideas he disbelieves and abhors is sinful and tyrannical," said Thomas Jefferson in 1777.

That logic has become the battle cry of the College Republican National Committee, which has mounted a major campaign against student groups that are financed through the collection of student-activity fees.

Jack Abramoff, national chairman of the committee, said in a telephone interview last week that 50-page booklets had been distributed to College Republican National Committee chapters around the country decrying alleged financing abuse by the student-activist groups, officially called public-interest research groups, or PIRG's.

The booklets suggest a strategy for combating the groups, some of which advocate such diverse causes as homosexual rights and environmental protection.

Mr. Abramoff said his organization was "opposed to compulsory funding of political advocacy, abuse of student consumers, and the denial of students' rights to choose which political causes they support."

Public-interest research groups have chapters on 160 college campuses in 26 states and get their financing from money collected as activity fees. The fees support a variety of campus activities, and the allocation of the money is determined by elected student-government associations, by student referenda, or, in a few cases, by college administrations.

Mr. Abramoff said that even when a majority of students decide to finance a particular campus group, "it is still denying a minority of students their Constitutional rights."

He also rejected the general policy that allows students to claim refunds of fees for uses they disagree with, saying it "places a burden on the dissenters and also forces them to disclose their ideology."

The personification of the public-interest research groups that are being attacked is Ralph Nader, the consumer advocate who inspired the groups.

Nader Blames Reaganites

Mr. Nader, in a telephone interview last week, said the college Republicans were interested in the elimination of all student organizations with which conservative Republicans might disagree, especially those supported by student fees. "This is clearly a political attack by Reaganites who are using college Republicans as a front. They are not just after PIRG's; they are after student newspapers whose editorials they might not like and civil-rights groups and student-education groups."

He accused the college Republicans of having covert ties with the Republican National Committee and with large corporations that are opposed to many of the positions advocated by public-interest research groups, but he added that student groups "have every right to organize their own activities subject to approval by an [college] administration, whether it is political or anything."

"This is an authoritarian move by the college Republicans," he said. "What they cannot tolerate is the way student elections have come out. Instead of trying to reverse student elections, they are trying to destroy the whole system. If it were on a national scale, it would be considered tyranny."

William I. Greener, III, director of communications for the Republican National Committee, denied Mr. Nader's accusations.

"It certainly is uncharacteristic of Mr. Nader to make accusations that are so poorly researched," he said. "The relationship, historically, between us and the college Republicans is no closer than that which exists between his organization and the PIRG's. I just regret he would make such a stupid statement."

Funds from National Committee

Mr. Greener said the college Republicans are an independent affiliate of the national committee, but the two organizations agree that particular points of view should not be financed by involuntary contributions.

The PIRG's "have the right to pursue whatever view they might want," he said, "but they should not be allowed the capacity to carry forward their argument with funds received non-voluntarily."

The national committee did provide the college Republicans with "less than $100,000" this year, Mr. Greener said.

It gave the organization more in previous years, he said.

As of last week, Mr. Abramoff said, challenges of public-interest research groups had begun at about 70 colleges and universities.

Lawsuits have been filed against public-interest research groups at Rutgers University and at the State University of New York by members of the college Republicans, Mr. Abramoff said, and college Republicans at other colleges are being encouraged to seek legal relief if student financing of such groups continues. —CHARLES S. FARRELL

FACT-FILE

U.S. Funds for Colleges and Universities

The top 100 institutions in total federal obligations for fiscal 1981

Institution	Research and development (a)		Total federal obligations (a)	
	Amount	Rank	Amount	Rank
Johns Hopkins U. (b)	$363,429,000	1	$378,608,000	1
Massachusetts Institute of Technology	146,035,000	2	164,782,000	2
Howard U. (c)	7,996,000	117	153,335,000	3
U. of Washington	99,965,000	4	128,147,000	4
Stanford U.	106,073,000	3	125,645,000	5
U. of Wisconsin, Madison	86,918,000	8	115,517,000	6
U. of California, Los Angeles	95,210,000	5	112,650,000	7
Harvard U.	87,830,000	7	106,361,000	8
U. of California, San Diego	91,403,000	6	101,718,000	9
U. of Minnesota	72,001,000	14	100,383,000	10
Cornell U.	72,671,000	13	100,345,000	11
Columbia U., Main Division	83,659,000	9	99,084,000	12
U. of Michigan	73,999,000	11	94,118,000	13
U. of Pennsylvania	76,136,000	10	93,655,000	14
Yale U.	73,526,000	12	88,084,000	15
U. of California, San Francisco	64,814,000	15	82,156,000	16
U. of California, Berkeley	64,065,000	16	77,966,000	17
Pennsylvania State U. (d)	47,099,000	21	72,603,000	18
U. of Illinois, Urbana	53,580,000	19	69,993,000	19
Ohio State U.	42,899,000	26	68,462,000	20
U. of Chicago	53,992,000	18	63,565,000	21
U. of Colorado	46,146,000	22	63,158,000	22
Washington U.	54,170,000	17	62,557,000	23
Michigan State U.	34,000,000	37	60,617,000	24
U. of Southern California	49,221,000	20	59,597,000	25
Duke U.	44,287,000	23	54,189,000	26
U. of North Carolina, Chapel Hill	38,447,000	30	52,815,000	27
U. of Rochester	42,983,000	25	52,599,000	28
New York U.	40,636,000	28	52,138,000	29
Texas A&M U.	34,398,000	36	51,938,000	30
Gallaudet College (d)	560,000	270	51,204,000	31
U. of Texas, Austin	43,756,000	24	50,955,000	32
Purdue U.	36,549,000	32	50,523,000	33
Yeshiva U.	42,590,000	27	49,804,000	34
U. of Pittsburgh	38,512,000	29	49,291,000	35
U. of Arizona	36,308,000	33	47,700,000	36
U. of Utah	38,163,000	31	47,520,000	37
U. of Florida	30,845,000	43	46,247,000	38
U. of Iowa	35,300,000	34	45,251,000	39
Indiana U.	29,276,000	45	44,662,000	40
Case Western Reserve U.	33,744,000	38	41,429,000	41
U. of Miami	28,956,000	46	40,803,000	42
Boston U.	27,019,000	51	39,754,000	43
Northwestern U.	32,446,000	41	39,541,000	44
U. of Alabama, Birmingham	29,970,000	44	39,389,000	45
U. of California, Davis	31,757,000	42	38,158,000	46
Baylor College of Medicine	35,062,000	35	37,921,000	47
Georgia Institute of Technology	33,116,000	39	37,188,000	48
California Institute of Technology	32,959,000	40	35,932,000	49
U. of Maryland, College Park	27,313,000	50	35,914,000	50
Oregon State U.	27,669,000	47	35,148,000	51
Vanderbilt U.	$27,426,000	49	$33,916,000	52
Inter American U. of Puerto Rico, San German	0	—	33,522,000	53
U. of Connecticut	22,196,000	55	33,139,000	54
Rutgers U.	18,011,000	68	33,139,000	55
U. of Tennessee, Knoxville	19,933,000	62	32,768,000	56
U. of Cincinnati	18,766,000	67	32,550,000	57
Louisiana State U.	19,005,000	65	32,069,000	58
U. of Virginia	24,333,000	52	31,740,000	59
New Mexico State U.	11,759,000	94	31,274,000	60
U. of New Mexico	18,976,000	66	30,455,000	61
U. of Texas Health Science Center, Dallas	23,911,000	53	29,442,000	62
North Carolina State U., Raleigh	16,758,000	73	29,339,000	63
U. of Kentucky	12,875,000	90	29,157,000	64
Woods Hole Oceanographic Institute	27,633,000	48	29,097,000	65
U. of Missouri, Columbia	14,477,000	84	28,900,000	66
Colorado State U.	21,487,000	57	28,879,000	67
Princeton U.	23,888,000	54	28,402,000	68
U. of Hawaii, Manoa	20,629,000	58	27,280,000	69
U. of Maryland Baltimore Professional Schools	20,414,000	60	27,121,000	70
U. of Massachusetts, Amherst	15,131,000	80	26,873,000	71
Virginia Poly. Inst. & St. U.	16,449,000	75	26,488,000	72
Temple U.	14,678,000	82	26,241,000	73
U. of Georgia	17,045,000	72	26,240,000	74
U. of Kansas	17,205,000	71	25,552,000	75
Carnegie-Mellon U.	21,915,000	56	25,434,000	76
U. of California, Irvine	20,614,000	59	25,059,000	77
Virginia Commonwealth U.	16,713,000	74	24,285,000	78
City U. of New York, Mount Sinai School of Medicine	19,874,000	63	23,519,000	79
State U. of New York, Stony Brook	19,602,000	64	22,377,000	80
U. of Illinois Medical Center, Chicago	12,931,000	88	21,982,000	81
George Washington U.	14,503,000	83	21,963,000	82
Iowa St. U. of Sci. & Tech.	10,396,000	102	21,942,000	83
Emory U.	17,374,000	70	21,927,000	84
Rockefeller U.	19,952,000	61	21,767,000	85
Wayne State U.	12,582,000	92	21,350,000	86
Tufts U.	15,642,000	78	20,935,000	87
Utah St. U.	15,412,000	79	20,859,000	88
Brown U.	16,020,000	77	20,783,000	89
State U. of New York, Buffalo	16,224,000	76	19,959,000	90
Washington State U.	12,896,000	89	19,599,000	91
U. of Vermont & State Agricultural College	11,950,000	93	18,960,000	92
U. of Dayton	15,049,000	81	18,672,000	93
U. of Nebraska, Lincoln	11,108,000	97	18,557,000	94
Georgetown U.	10,327,000	103	18,505,000	95
U. of Texas Cancer Center	17,789,000	69	18,459,000	96
Syracuse U.	10,689,000	98	18,161,000	97
U. of California, Santa Barbara	12,688,000	91	17,620,000	98
Oklahoma State U.	7,028,000	127	17,206,000	99
Mississippi State U.	6,537,000	133	16,669,000	100
U.S. total	**$4,409,143,000**		**$7,718,994,000**	

(a) Amounts shown represent total obligations from 14 federal agencies that accounted for over 95 per cent of all federal obligations to universities and colleges in the United States and for 99 per cent of all federal obligations to such institutions for research and development. These proportions may not apply to all individual institutions, some of which receive significant amounts of their financing from agencies not included in the survey, such as the Department of Justice, the Veterans Administration, and the Smithsonian Institution. Amounts shown represent awards to individual institutions. Awards to the administrative offices of university systems are excluded from institutional totals because final allocation of funds is unknown, but are included in "U.S. total."

(b) Data for Johns Hopkins U. include $238-million obligated to the Applied Physics Laboratory, considered a federally financed research-and-development center until fiscal 1978.

(c) Howard U. and Gallaudet C. receive substantial appropriations from Congress each year for general operating expenses; their relative rankings thus reflect the magnitude of their non-science programs.

(d) Data for Pennsylvania State University include $12-million obligated to the Applied Research Laboratory, considered a federally funded research and development center until fiscal 1978.

SOURCE: NATIONAL SCIENCE FOUNDATION

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News Summary

Articles on inside pages

At most colleges the number of freshman applications received by the end of February was higher than the number received by that time last year. Story on Page 10.

An organization of historically black colleges says it will go to court, if necessary, to stop a proposal that would set academic standards for college athletes. Story on Page 13.

The history of rock-and-roll can tell students a lot about the history of America, according to the teacher of such a course. Story on Page 5.

Real-estate development can be a wise investment for universities that need less land for their campuses and more money for their endowments. Story on Page 8.

Nearly 300 scholars, scientists, and artists have been awarded Guggenheim fellowships this year. List of winners on Page 30.

A program to provide low-cost coaching for the Scholastic Aptitude Test began last week in New York. Story on Page 7.

The president of Bellevue College must pay income taxes on the value of his college-provided housing, a federal court has ruled. Story on Page 21.

Lewis Thomas, an eloquent interpreter of science for lay readers, has written a memoir of his career in medicine. Story on Page 23.

In France, government support for science is continuing to increase, but not at the rate the Socialist government had promised. Story on Page 17.

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Lots of U.S. Aid Still Available, Students Assured

By JANET HOOK

Many colleges are taking aggressive steps to tell prospective students that the financial-aid till is far from empty—to counter the widespread belief that grants and loans have been decimated by cutbacks in federal funds.

"Right now a lot of you may be confused," says a radio announcement addressed to students who may be trying to decide whether they can afford to attend college next fall. "There's just as much financial aid available this year as last. Check it out with your guidance counselor.

"If the school that you want wants you, the funds are there to get the two of you together."

That message is part of a series of public-service announcements produced recently by the College Board, with the support of a $15,000 grant from the Ford Foundation. Distributed to 1,000 radio stations around the country, the announcements are intended to correct the impression, which educators report has been common, that financial aid is no longer readily available.

College officials fear that students have become unduly pessimistic about their prospects for receiving aid, and that eligible students may not even bother to apply, in response to President Reagan's highly publicized efforts during the past two years to curtail federal grants and loans.

Even though Congress blocked most of

Continued on Page 6, Column 1

Publishers Withdraw Lawsuit Charging NYU and Professors with Copyright Infringement

University will step up its efforts to control photocopying

By STACY E. PALMER

NEW YORK

A group of book publishers has settled out of court a lawsuit charging New York University and several of its professors with copyright infringement.

In return for the publishers' dropping the lawsuit, N.Y.U. agreed to step up its efforts to control unauthorized photocopying by faculty members of copyrighted works.

The university and nine faculty members had been charged last December with using photocopies of protected works without seeking permission from the publishers. One of the professors has since died.

The lawsuit was the first to attempt to hold a university and individual scholars directly accountable for alleged violations of copyright laws. By suing N.Y.U., one of the nation's largest private universities, the publishers attracted considerable attention in higher education.

Although publishing officials said they were optimistic that the settlement with N.Y.U. would reduce the amount of unauthorized photocopying on other campuses, they said they would consider suing other universities.

"We will continue to closely monitor the photocopying done at colleges across the nation," said Carol A. Risher, director of copyright for the Association of American Publishers.

Both publishing and higher-education officials said they expected many other universities to adopt policies based on N.Y.U.'s model.

In an earlier effort to curb unauthorized uses of photocopied materials, the publishers sued a chain of off-campus copy shops. The publishers also obtained a favorable out-of-court settlement in that suit, which was directed against the Gnomon Corporation, a Cambridge, Mass., company that runs stores near several major Northeastern universities.

The text of the policy statement on copyright adopted by New York University as part of the settlement appears on Page 22.

The publishers have also negotiated successful out-of-court settlements in recent actions against several research-oriented companies, including the American Cyanamid Company and E. R. Squibb & Sons Corporation.

In the settlement, N.Y.U. agreed to adopt a strict policy governing the use of photocopied materials by faculty members. The university will remind professors about the copyright laws on a regular basis and post notices about the policy at all copying facilities on the campus.

Faculty members will be asked to file copies of their requests for permission to use protected works, along with responses from the copyright owners, with the office of the university's legal counsel.

S. Andrew Schaffer, vice-president and general counsel of the university, said he had discussed the policy statement with some N.Y.U. faculty members and that

Continued on Page 22, Column 3

University Budget-Cutters Eye Continuing-Education Divisions

By BEVERLY T. WATKINS

RENO

The continuing-education divisions of universities, which have offered adults a wide variety of credit and noncredit programs for years without attracting serious attention from their institutions, are undergoing a review by top academic administrators.

The deans and directors of the divisions, who have often complained that their universities considered their programs "probably necessary, but a little illegitimate," as one educator put it, are becoming uneasy now that their field is in the spotlight.

Many are concerned—with good reason—that their programs are becoming the chief target of university budget-cutters. In the last two years, the deans have watched administrators who are reorganizing departments and trimming programs turn first to continuing education. Some programs have already been scaled down or eliminated, and some continuing-education administrators are afraid more reductions may come.

Other deans and directors—exhibiting the optimism that has always characterized continuing education—are beginning to view the campus "shakedown revolutions," as one calls them, as an opportunity to gain new status and establish their programs as an integral part of the university structure.

They point out that a few university administrators, for both philosophical and practical reasons, are now modifying their

Continued on Page 10, Column 1

Professors and Profits

Establishing research ties with industry can be profitable for professors and their universities. But to take part in corporate research projects, professors must gear themselves "to playing by industry's rules," a consultant says. Most important: Help a company gain a competitive advantage.

For details, see Page 21.

Budget Cuts

Continued from Page 1

views about continuing education. Some are beginning to regard it as a desirable, necessary, and even essential function of their institutions.

"A set of notions or principles that ought to characterize a university that is seriously interested in serving adult students is beginning to emerge," says Harvey J. Stedman, dean of New York University's school of continuing education.

He sees campuses "on all fronts" now searching for "a way to weave into the fabric of the university the attitudes and knowledge and competence of continuing education so adult students are not served by just one segment of the campus."

Changing Demographics

Sherry May, dean of the University of Southern California's college of continuing education, says, "The university central administration is beginning to recognize the real significance of the changing demographics, which show that there will be fewer 17-to-20-year-olds and more adult students who want to finish a degree or change a career."

To accommodate to such changes, she says, the University of Southern California "has just made a major commitment to adult learners. We have recognized that we need to open our eyes to the possibilities offered by adult, part-time students."

Her university has begun "a reorganization that will take well into 1984 to complete," she says. "We are moving now to forge a new model that will utilize the expertise of all the colleges in such a way that the entire university can move forward in continuing education."

Deans and directors attending the annual conference of the National University Continuing Education Association here this month spent a great deal of time speculating about the current state of their field and its future. As they analyzed their activities, several trends became evident:

▶ Some campuses, such as the University of Minnesota and U.S.C., are transferring responsibility for credit education to the professional schools and academic departments. In some instances, those academic units are creating "mini-colleges" of continuing education and hiring new staff members to provide adult programs. In others, they are collaborating with established continuing-education divisions to the same end.

▶ With the loss of their credit offerings, many schools and colleges of continuing education are becoming centers for noncredit education with specialized programs for professionals who must continue their education to retain their state licenses. The directors of these scaled-down credit centers are coming under pressure from the universities to make their operations self-supporting. They are also worrying that the professional schools will try to take over the lucrative noncredit programs, since they will control credit education.

▶ The large self-sustaining continuing-education divisions, such as those at the University of California at Berkeley and N.Y.U., have made few if any changes in their operations. In general, their independence has protected them from the university budget-cutters. However, those divisions are now being forced to give the university a greater share of their "profits."

▶ Some financially strapped institutions, such as the University of Michigan and Wayne State University, have reduced their continuing-education divisions to little more than educational brokers that make arrangements for classroom space and provide student services.

"Until recently, a crucial problem for continuing education has been benign neglect by university administrations. We have gone our own way in centralized divisions in the universities and counted ourselves fortunate that we have not had undue interference from faculties or administrations," said Milton R. Stern, dean of university extension at Berkeley.

However, he said, "In the last three or four years, the flip side of that indifference—that senior administrators don't know us and don't have a feeling for what we do—has made it that much easier for them to cut us out of the budget."

In spite of the university's view that continuing education is "fat to be trimmed when resources are scarce," Mr. Stern said a recent informal survey of deans and administrators that he conducted indicated that most divisions "appear to be holding their own."

He found that the programs experiencing the greatest financial difficulties were those that relied in part on state appropriations. When public universities were forced to cut their budgets after state legislatures withdrew some appropriations, the continuing-education divisions had to accommodate a share of the cuts.

Mr. Stern said the self-supporting continuing-education units have "suffered far less" financially.

30-Pct. Drop

He said his survey showed that enrollments in credit programs were dropping at some institutions by as much as 30 per cent, while those in noncredit courses were increasing by the same amount.

Mr. Stern predicted that "the future for continuing education lies essentially in noncredit programs for people who hold baccalaureate degrees."

"The Bureau of the Census counted 22.9 million college and university graduates in 1979. Today, there are 24 million people in the United States with the bachelor's degree or better. By the year 2000, there will be 40 million. That is our prime audience," he said.

Most educators at the conference agreed that programs for adults must now be made an integral part of university activities, but they disagreed on how successful the professional schools and other academic units would be in handling continuing education.

Harold A. Miller, dean of continuing education and extension at the University of Minnesota, predicted that involvement by the academic units "will have a good effect on continuing-education programs."

He said, "There will be a more thoughtful integration of credit offerings into the university. There will be a collegiate commitment to continuity. The outreach clientele will get a fuller range of offerings."

However, Richard R. Weeks, dean of the college of business administration at the University of Rhode Island, said that faculty members in some professional schools were not interested in continuing education.

"We have some business faculty members who are tradition-bound," he said. "They are comfortable to stay on campus and look inward. They certainly don't like being out after 5 p.m. or driving 10 miles away. That will be a complex and difficult thing that we will have to work on."

CHRONICLE SURVEY

Majority of Colleges Report Rise in Freshman Applications

A majority of the nation's colleges and universities had received more freshman applications by the end of February this year than by the same date last year, according to a new survey for *The Chronicle*.

The survey, which was based on a stratified random sample of 230 four-year colleges and universities with enrollments of more than 500 students, found that applications had increased at 53.9 per cent of the institutions.

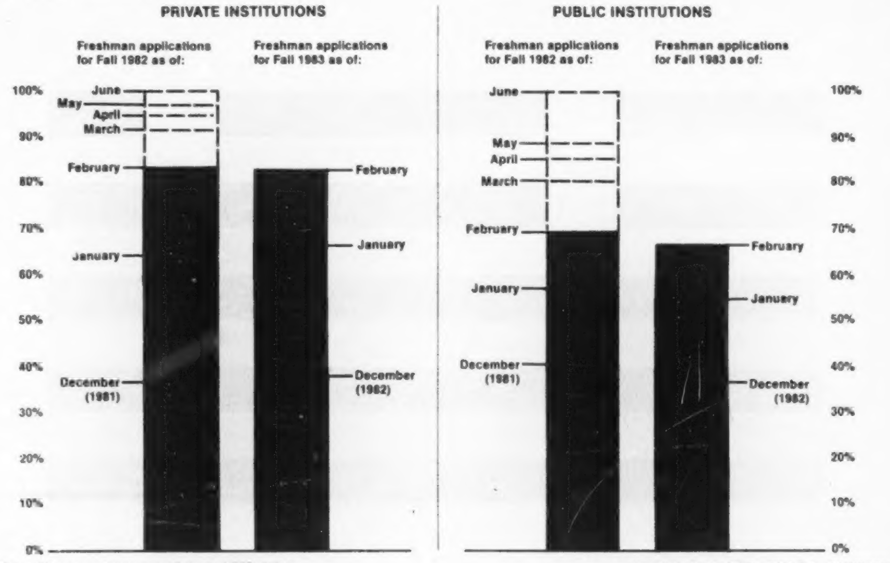
Some 56.5 per cent of private higher-education institutions reported that freshman applications had increased over those of last year. For the same period, 49.1 per cent of public institutiions said their applications were up.

Total applications for all institutions, public and private, at the end of February were down 1 per cent, according to the survey.

In terms of enrollments, private institutions with between 500 and 1,000 students reported the largest increases in applications—9.4 per cent—while public institutions with between 2,500 and 5,000 students had the largest decreases.

Public institutions in the West and Southwest reported a drop of 10.2 per cent.

The survey of freshman applications was conducted for *The Chronicle* by John Minter Associates, a higher-education research organization in Boulder, Colo.



Note: All percentages are of June, 1982, total

CHRONICLE CHART BY PETER H. STAFFORD

Changes in Number of Freshman Applicants

February 28, 1983, compared with February 28, 1982

	Per cent change in average (a)	Per cent reporting increase	Per cent reporting decrease	Per cent change		
				Low (b)	Median (c)	High (d)
Private colleges and universities						
Research and Ph.D.-granting	- 2.9%	43.5%	56.5%	- 7.2%	- 2.6%	+ 7.7%
Comprehensive	- 1.9%	42.0%	58.0%	-10.4%	- 2.7%	+ 3.0%
Liberal arts	+ 1.9%	60.7%	39.3%	- 7.8%	+ 4.5%	+20.2%
Regions						
Northeast and Mid-Atlantic	- 2.1%	45.2%	54.8%	- 8.5%	- 1.5%	+ 8.1%
Great Lakes and Plains	- 1.1%	54.8%	45.2%	- 8.9%	+ 1.6%	+15.7%
Southeast	+ 2.0%	59.0%	41.0%	- 7.4%	+ 2.5%	+14.6%
West and Southwest	+ 1.5%	62.9%	37.1%	-11.9%	+ 2.3%	+ 9.2%
Enrollment						
500 - 999	+ 9.4%	66.7%	33.3%	- 9.1%	+ 7.8%	+33.3%
1,000 - 2,499	- 0.2%	49.1%	50.9%	- 8.7%	- 0.3%	+11.6%
2,500 - 4,999	- 1.7%	52.9%	47.1%	- 8.1%	+ 0.2%	+ 5.1%
5,000 - 9,999	+ 5.0%	40.9%	59.1%	-14.3%	- 4.5%	+ 8.6%
10,000 and over	+ 0.1%	46.2%	53.8%	- 5.7%	- 1.7%	+ 2.0%
All private institutions	+ 0.9%	56.5%	43.5%	- 8.7%	+ 0.8%	+12.2%
Public colleges and universities						
Research and Ph.D.-granting	- 2.0%	39.1%	60.9%	- 8.6%	- 1.3%	+ 5.5%
Comprehensive	- 5.5%	52.3%	46.2%	- 8.9%	+ 0.2%	+ 9.0%
Regions						
Northeast and Mid-Atlantic	- 1.8%	52.4%	47.6%	- 6.1%	- 1.6%	+ 6.5%
Great Lakes and Plains	- 2.2%	36.2%	61.7%	- 8.3%	- 1.2%	+ 3.0%
Southeast	+ 0.8%	53.1%	46.9%	- 6.9%	+ 0.4%	+11.4%
West and Southwest	-10.2%	46.7%	53.3%	-14.0%	- 5.6%	+13.4%
Enrollment						
500 - 2,499	- 0.9%	50.0%	40.0%	- 9.1%	0.0%	+13.8%
2,500 - 4,999	- 8.5%	40.0%	60.0%	-13.6%	- 5.0%	+ 9.6%
5,000 - 9,999	- 2.9%	46.2%	53.8%	- 9.4%	- 2.2%	+ 7.5%
10,000 -19,999	- 0.7%	53.8%	46.2%	- 7.1%	+ 0.1%	+ 7.7%
20,000 and over	- 3.7%	37.5%	62.5%	- 8.9%	- 1.2%	+ 5.2%
All public institutions	- 4.6%	49.1%	49.8%	- 8.6%	- 1.1%	+ 7.7%
All institutions	- 1.0%	53.9%	45.7%	- 8.6%	0.0%	+10.7%

(a) Percentage change in mean number of applications by February 28, 1982, compared with the mean for a year earlier

(b) The bottom one-fourth of the institutions reported changes smaller than the percentage shown.

(c) Half of the institutions reported changes greater than the percentage shown.

(d) The top one-fourth of the institutions reported changes greater than the percentage shown.

Note: Survey data are from a stratified random sample of 230 four-year colleges and universities, excluding those with enrollment under 500.

SOURCE: SURVEY FOR THE CHRONICLE BY JOHN MINTER ASSOCIATES

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Job offers to graduating college students are down, the College Placement Council has reported. Story on Page 9.

An appeals court has ruled that a federal anti-sex-bias law applies to a men's honorary society at the University of Miami. Story on Page 10.

A Senate subcommittee has approved a $400-million measure that would provide training for high-school teachers of science and mathematics. Story on Page 11.

Several groups have asked Congress to help put a stop to proposed rules affecting equal-employment requirements for federal contractors. Story on Page 11.

"Networking"—the process of developing professional contacts—can be an invaluable help to women in academe. Story on Page 19.

Who killed the law professor? Ask Garnet Garrison and Alfred Slote, two academics-turned-mystery-writers. Story on Page 21.

Many Western academics refused to attend a Warsaw conference on genocide held in conjunction with a commemoration of the 1943 uprising in the Jewish ghetto there. Story on Page 17.

The campus of National University in El Salvador, occupied by the military since June, 1980, may soon reopen if enough money can be raised. Story on Page 17.

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Colleges' Energy Costs May Double if U.S. Lifts Limits on Gas Prices

Senate panel begins debate on proposals for decontrol

By **JACK MAGARRELL**

WASHINGTON

The Senate Committee on Energy and Natural Resources last week began work on new natural-gas legislation that could, by some estimates, double higher education's energy costs within three years.

Decontrol of natural-gas prices, as proposed by President Reagan and in a number of variations introduced in both houses of Congress, would have a "devastating" impact on energy budgets of colleges and universities, said Christopher E. Crittenden, director of the higher-education Energy Task Force.

About eight years ago, energy costs, including electric power, accounted for 2 to 4 cents of every dollar that American colleges and universities spent, Mr. Crittenden said. Now the figure is 7 to 10 cents, he said.

With the decontrol of natural-gas prices, he said, the energy share of college budgets could burn up 15 cents of every dollar in campus budgets.

That would mean an increase in spending for fuel and electric power from roughly $3-billion in the past year to $6-billion or more following decontrol, Mr. Crittenden estimated.

Even with existing federal controls, natural-gas prices have risen sharply in recent years, while oil prices have started to drop. As a result, some universities that switched from oil to gas during the oil crisis of the 1970's are now switching back to oil.

The Senate committee's starting point in writing new natural-gas legislation is President Reagan's proposal, embodied in a bill designated S 615. That bill would decontrol natural-gas prices in all new and renegotiated contracts and permit other contracts to be broken by either the producer or pipeline company after January 1, 1985.

In the House of Representatives, the Energy and Commerce Subcommittee on Fossil and Synthetic Fuels has been holding hearings on natural-gas legislation over the past two months.

A Surplus of Gas

Proponents of decontrol argue that now is a good time for the action because there is a surplus of natural gas—due to competition from lower oil prices and to reduced consumption because of the recession and a mild winter. Theoretically, the current supply-and-demand situation would preclude a dramatic rise in unleashed natural-gas prices.

Opponents of decontrol say supply and demand have little effect on natural-gas prices, and that during the year ending last September, natural-gas prices rose 19 per cent while fuel-oil prices fell 4 per cent. Since 1973, average residential prices for natural gas have increased fivefold.

Colleges and universities are heavily dependent upon natural gas for heating. Mr.

Continued on Page 8, Column 4

Universities Are Urged to Set Rules on Fraud

Charges of misconduct by researchers worry AAU

By **KIM McDONALD**

WASHINGTON

Universities should adopt specific policies to "encourage intellectual honesty" and handle allegations of fraud or unethical behavior by their researchers, the Association of American Universities has recommended in a report that outlines how such procedures might be established.

The four-page report, which the association will send to research institutions across the country, also encourages researchers to give rigorous review to footnotes and claims of authorship in books and articles to deter plagiarism.

It also reminds senior-level scientists that they must share the blame for any unethical behavior by members of their staffs.

Last July the Association of American Medical Colleges recommended more than 20 steps that medical schools could take to establish procedures that would promote high ethical standards among their researchers, but not "inhibit the productivity and creativity of scientists."

The text of the recommended procedures on fraud in research appears on Page 8.

Some institutions, such as Stanford University and the Harvard University medical school, have already adopted guidelines to deal with instances of alleged misconduct.

The A.A.U., which represents major research universities, recommended that all research institutions establish policies because of growing concern by the public and government about instances of scientific fraud, and because of questions about whether institutions are capable of investigating those incidents and disciplining their researchers.

The report was drafted by the association's Committee on the Integrity of Research, chaired by William H. Danforth,

Continued on Page 8, Column 1

Settlement of Copyright Suit Fails to End Dispute over Photocopying

By **STACY E. PALMER**

WASHINGTON

The photocopying rights of college teachers were thrown into fresh uncertainty last week in the wake of an out-of-court settlement between New York University and a group of book publishers that had sued it and several of its professors for alleged copyright infringement. Among the new developments:

▶ The National Association of Quick Printers, which represents many photocopying stores near college campuses, said it would send literature to some 60,000 professors to reassure them about copying privileges under the "fair use" provisions of the Copyright Act of 1976.

▶ An official of the American Association of University Professors, after meeting with leaders of the printers' group, said it would cooperate with the copy stores' publicity efforts. Alfred D. Sumberg, director of government relations for the A.A.U.P., said his association was afraid college teachers had been unduly "frightened" by publishers' threats of further legal action against unauthorized photocopying of protected works.

▶ The Unique Copy Center, a private photocopying shop in New York City that also was named in the publishers' suit, continued to contest the case. M. Andrea Ryan, a lawyer for the store, acknowledged reports that it had filed a counterclaim against the publishers in a federal district court in New York, accusing them of violating federal antitrust regulations in their lawsuit.

The store's legal documents said the

Continued on Page 20, Column 1

ROBERT GINN

How to Compensate Injured Athletes?

College sports associations have decided to offer their members insurance to cover athletes and to protect colleges against lawsuits arising from sports-related injuries. They have rejected, at least for now, a planned foundation to aid injured players.

See the "Athletics" section, beginning on Page 15.

FACT-FILE

Voluntary Support for Higher Education, 1981-82

	74 private universities	5 private men's colleges	71 private women's colleges	404 private coeducational institutions	48 professional and specialized schools	188 public 4-year institutions	41 2-year institutions	Total for 837 institutions
AMOUNT OF SUPPORT								
Current operations	$797,975,000	$6,611,000	$62,299,000	$386,432,000	$61,368,000	$742,719,000	$9,360,000	$2,066,764,000
1-year change	+ 6.6%	+25.9%	+10.2%	+10.5%	+ 6.8%	+17.7%	+ 7.2%	+11.3%
Capital	$715,523,000	$10,299,000	$58,573,000	$494,754,000	$74,950,000	$317,506,000	$9,167,000	$1,680,772,000
1-year change	+23.7%	+ 9.2%	− 4.4%	+25.6%	+57.3%	+16.6%	− 1.0%	+22.4%
Total	**$1,513,498,000**	**$16,910,000**	**$120,872,000**	**$881,186,000**	**$136,318,000**	**$1,060,225,000**	**$18,527,000**	**$3,747,536,000**
1-year	**+14.0%**	**+15.2%**	**+ 2.5%**	**+18.5%**	**+29.7%**	**+17.4%**	**+ 3.0%**	**+16.0%**
SOURCES OF SUPPORT								
Alumni	$506,920,000	$7,398,000	$54,426,000	$223,378,000	$13,187,000	$195,834,000	$1,865,000	$1,003,008,000
1-year change	+40.1%	+39.4%	+ 4.2%	+ 6.3%	+23.1%	+16.7%	+ 6.9%	+23.9%
Nonalumni	$299,434,000	$4,118,000	$20,846,000	$269,761,000	$43,940,000	$189,516,000	$6,986,000	$834,602,000
1-year change	−11.0%	−21.8%	− 8.1%	+32.9%	+53.1%	+17.8%	−13.4%	+ 9.1%
Foundations	$331,207,000	$2,031,000	$21,493,000	$183,499,000	$42,303,000	$205,048,000	$2,629,000	$788,210,000
1-year change	+ 7.5%	−13.3%	− 5.0%	+29.7%	+12.3%	+ 8.9%	+21.2%	+12.2%
Business corporations	$268,991,000	$1,598,000	$10,415,000	$ 87,702,000	$24,662,000	$339,618,000	$4,014,000	$736,998,000
1-year change	+17.1%	+58.7%	+ 6.7%	+ 5.8%	+52.1%	+33.4%	+25.3%	+23.4%
Religious denominations	$ 26,315,000	$1,197,000	$ 7,774,000	$ 73,795,000	$ 6,773,000	$473,000	$2,174,000	$118,501,000
1-year change	+36.1%	+418.6%	+39.5%	+10.6%	+ 3.0%	−55.9%	+ 3.7%	+16.6%
Others	$ 80,630,000	$568,000	$ 5,918,000	$ 43,051,000	$ 5,453,000	$129,736,000	$859,000	$266,217,000
1-year change	+12.3%	+ 8.3%	+17.6%	+ 9.5%	+ 4.0%	− 0.8%	+20.7%	+ 5.1%
PURPOSES								
Unrestricted	$366,664,000	$5,876,000	$60,803,000	$392,736,000	$43,497,000	$138,089,000	$9,366,000	$1,017,030,000
1-year change	− 1.4%	+12.4%	+ 8.3%	+12.0%	+17.2%	+15.7%	− 3.3%	+ 7.0%
Physical plant	$202,789,000	$4,421,000	$16,623,000	$178,202,000	$33,766,000	$117,809,000	$4,805,000	$558,413,000
1-year change	− 0.9%	−21.2%	−26.1%	+12.6%	+95.8%	+ 8.4%	+20.8%	+ 7.2%
Basic research	$208,346,000	$92,000	$ 1,853,000	$ 4,762,000	$22,530,000	$285,107,000	$ 8,000	$522,700,000
1-year change	+11.2%	+192.3%	+ 2.2%	−27.3%	−15.0%	+ 9.8%	+12.6%	+ 8.4%
Student financial aid	$156,327,000	$1,965,000	$20,066,000	$134,948,000	$12,660,000	$169,721,000	$2,675,000	$498,365,000
1-year change	+ 5.3%	+ 3.1%	+61.7%	+52.7%	+48.4%	+17.7%	+ 3.3%	+22.6%
Faculty compensation	$110,563,000	$809,000	$ 4,690,000	$ 38,097,000	$10,989,000	$57,247,000	$402,000	$222,796,000
1-year change	− 4.2%	+85.4%	−53.4%	+18.1%	+41.4%	+16.4%	+27.3%	+ 3.4%
Others	$468,809,000	$3,747,000	$16,834,000	$132,441,000	$12,876,000	$292,253,000	$1,272,000	$928,232,000
1-year change	+56.8%	+154.2%	+12.6%	+23.1%	+62.4%	+31.4%	−10.7%	+41.8%

	74 private universities	7 private men's colleges	77 private women's colleges	496 private coeducational colleges	73 professional and specialized schools	256 public institutions	118 2-year institutions	Total for 1,101 institutions
SUPPORT THROUGH THE ANNUAL FUND								
Total alumni of record	4,922,724	62,634	720,747	5,213,555	465,054	11,803,414	532,810	23,720,938
Alumni solicited for annual fund	3,990,916	58,877	632,356	4,358,579	397,475	9,231,237	265,328	18,934,768
Alumni donors to annual fund	991,185	18,835	201,940	1,009,459	74,985	1,254,991	31,282	3,582,677
Alumni gifts to annual fund	$140,450,000	$2,582,000	$24,098,000	$98,990,000	$7,920,000	$97,483,000	$1,661,000	$373,184,000
Nonalumni parents' gifts to annual fund	$6,937,000	$250,000	$2,261,000	$10,480,000	$269,000	$1,379,000	$348,000	$21,923,000
Total gifts to annual fund	$235,266,000	$5,519,000	$45,819,000	$267,820,000	$28,486,000	$236,692,000	$7,462,000	$821,065,000
CORPORATIONS' MATCHING GIFTS								
Total number of gifts matched	100,079	2,387	15,490	93,626	9,412	79,201	2,111	302,306
Support from matching-gift programs	$23,083,000	$558,000	$3,528,000	$20,906,000	$1,741,000	$13,718,000	$350,000	$63,883,000

n.a.—not available

Support Compared with Prices, Spending, Enrollment

	Estimated voluntary support				Institutional expenditures					
		Per student				Per student				
Academic years	Total	Current	Adjusted†	Share of total	Total	Current	Adjusted†	Total enrollment	Consumer Price Index*	Higher Education Price Index*
1949-50	$ 240,000,000	$ 90	$126	9.6%	$ 2,500,000,000	$ 940	$1,310	2,659,000	71.7	n.a.
1965-66	1,440,000,000	241	251	9.5%	15,200,000,000	2,547	2,656	5,967,000	95.9	95.0
1970-71	1,860,000,000	215	181	6.9%	27,100,000,000	3,130	2,637	8,649,000	118.8	128.6
1975-76	2,410,000,000	213	128	5.6%	42,700,000,000	3,780	2,280	11,291,000	165.9	177.2
1980-81	4,230,000,000	350	136	6.2%	68,600,000,000	5,671	2,185	12,097,000	258.6	263.9
1981-82	4,860,000,000	383	140	6.4%	73,100,000,000	5,909	2,104	12,372,000	280.8	290.1
Average annual change										
1949-50 to 1965-66	+11.9%	+ 6.4%	+ 4.4%		+11.9%	+ 6.4%	+ 4.5%	+ 5.2%	+ 1.8%	n.a.
1965-66 to 1970-71	+ 5.3%	− 2.3%	− 6.3%		+12.3%	+ 4.2%	− 0.1%	+ 7.7%	+ 4.4%	+ 6.2%
1970-71 to 1975-76	+ 5.3%	− 0.2%	− 6.7%		+ 9.5%	+ 3.8%	− 2.9%	+ 5.4%	+ 6.9%	+ 6.6%
1975-76 to 1980-81	+11.9%	+10.4%	+ 1.7%		+ 9.9%	+ 8.4%	− 0.8%	+ 1.4%	+ 9.4%	+ 8.3%
1980-81 to 1981-82	+14.9%	+12.3%	+ 3.7%		+ 6.6%	+ 4.2%	− 3.7%	+ 2.3%	+ 8.2%	+ 9.9%

† Adjusted to 1967 dollars, according to Consumer Price Index.
* 1967 = 100
n.a.—not available

SOURCE: COUNCIL FOR FINANCIAL AID TO EDUCATION

Gifts to Colleges Rise by 15 Pct., to $4.86-Billion

By BEVERLY T. WATKINS

Total voluntary support for the nation's higher-education institutions increased by almost 15 per cent in 1981-82, to an estimated $4.86-billion, a survey by the Council for Financial Aid to Education has found.

The largest share of voluntary contributions—about $2.9-billion—went to private four-year colleges and universities, as it has done traditionally. Public four-year institutions received about $1.2-billion. The balance was given to professional schools and two-year colleges.

Alumni of both public and private institutions, other individual donors, corporations, foundations, and religious organizations all increased their support for colleges and universities last year—some by as much as 25 per cent.

The council's estimates of voluntary support, which are being announced this week, are based on an annual nationwide survey. Some 1,101 public and private colleges and universities took part in the project.

Total voluntary support for higher education in 1981-82 covered an estimated 6.4 per cent of college and university expenditures, up from 6.2 per cent the previous year.

The council said voluntary contributions amounted to $393 per student, up from $350 a year earlier.

About one-fifth of the additional contributions in 1981-82 came from the estate of Edward Mallinckrodt, Jr., chairman of the board of Mallinckrodt Chemical Works in St. Louis, who left $77-million to Harvard University and $38-million to Washington University. He was an alumnus of both institutions.

Corporate Gifts Up

Corporations gave an estimated $976-million, an increase of 25 per cent over 1980-81. The corporate total included a newsreel-film library valued at $30.4-million, donated to the University of California at Los Angeles by the Hearst Corporation, and gifts of computers and equipment valued at about $70-million.

The council speculated that the Economic Recovery Tax Act of 1981 had encouraged corporations to increase their noncash gifts. The act permits more liberal valuations of gifts of goods to be used for research by higher-education institutions.

Contributions from foundations passed the billion-dollar mark for the first time.

The council estimated that almost 20 per cent of alumni, the largest percentage since 1967-68, had contributed to annual funds in 1981-82, compared to fewer than 17 per cent in 1980-81.

The following institutions had the highest totals of voluntary support:

1. Harvard U.	$181,018,507
2. Yale U.	82,162,299
3. Stanford U.	76,966,527
4. U. of Cal. at Los Angeles	63,032,616
5. Washington U.	57,219,874
6. U. of Southern California	56,555,220
7. U. of Minnesota	54,871,621
8. Cornell U.	50,929,223
9. Columbia U.	50,583,039
10. Princeton U.	47,352,359
11. Mass. Inst. of Technology	46,590,872
12. U. of Michigan	45,579,115
13. U. of Illinois	44,699,065
14. U. of Chicago	43,313,424
15. U. of Pennsylvania	42,317,010
16. Texas A&M U.	40,797,795
17. U. of Wisconsin at Madison	40,172,696
18. Northwestern U.	38,440,242
19. Johns Hopkins U.	36,670,952
20. New York U.	35,377,612
Multiple-unit systems not included above:	
U. of California	$130,928,127
U. of Texas	91,471,283

Side-lines

Most runners would never think of smoking cigarettes, much less at the rate of a pack a day.

But those who run near traffic in urban areas can retain as much carbon monoxide in their blood as chronic smokers, according to a recent study by two Cornell University medical school researchers.

Examining the blood of 16 people immediately after they ran along a congested highway in New York City for 30 minutes, the researchers found the pollutant attached to about 5 per cent of the hemoglobin—the substance that carries oxygen to the tissues—in their blood.

That has the effect of reducing the ability of the blood to carry oxygen to the tissues.

Smoking 10 to 20 cigarettes per day results in a carbon monoxide concentration within a person's blood of 5 to 9 per cent, the scientists said in an article in the *Physician and Sports Medicine*.

Thus, they said, their results imply "that running in an urban area for one-half hour produces an exposure similar to smoking one-half to one pack of cigarettes a day."

•

Joan Benoit, below, women's cross-country coach at Boston University for the past two years, shattered the women's world record when she won the Boston Marathon last week in 2 hours, 22 minutes, and 42 seconds. That's 2 minutes, 47 seconds faster than the previous record.

Ms. Benoit plans to leave the university in June to concentrate on her own running in preparation for next year's Olympic Games.

Ms. Benoit's accomplishment is just the latest evidence of the dramatic improvement in the performance of female athletes in recent years.

WIDE WORLD

In 1964, the women's world marathon record was 3 hours, 27 minutes, and 45 seconds. In this year's Boston Marathon, 60 women ran the race in 3 hours or less.

Said one men's coach of Ms. Benoit: "If she keeps this up, she'll qualify for the men's [Olympic] trials." (The present men's record in the marathon is 2 hours, 8 minutes, and 13 seconds.)

Athletics

Insurance Is Choice of Sports Associations to Aid Injured Players and Avoid Lawsuits

ROBERT GINN, LONG BEACH PRESS-TELEGRAM

Todd Hart of California State U. at Long Beach is given first aid during a game last September. He remains "severely quadriplegic," according to his physician.

By N. SCOTT VANCE

The three national associations that administer college sports have apparently settled a long-running debate over how best to help catastrophically injured athletes while at the same time protecting institutions and their personnel from lawsuits stemming from such injuries.

The National Junior College Athletic Association and the National Association for Intercollegiate Athletics will offer their members this fall a group-insurance policy that provides lifetime financial support to any athletes who are paralyzed or catastrophically injured in other ways. The National Collegiate Athletic Association is negotiating with several insurance companies to provide its members with the same type of coverage.

Although in an average year only one or two college football players suffer injuries that leave them permanently incapacitated, the costs can be catastrophic for the students and their family. Many threaten to file lawsuits against their institutions, coaches, and the manufacturers of protective equipment.

During the 1982 season, two college players suffered such injuries and three others died of injuries related indirectly to playing football. There were no fatalities in 1982 related directly to the college game.

Alternative Plan Spurned

To get the insurance benefits under the plans being offered, students must waive their rights to sue their institutions as well as coaches, trainers, and other personnel. In deciding—albeit tentatively, in the N.C.A.A.'s case—to buy such insurance, the three associations have spurned an alternative plan to help develop a nonprofit foundation that would provide similar help for athletes who are seriously injured.

The National Sports Rehabilitation Foundation, which was established over a year ago but has not begun to raise money needed to help athletes, would offer many of the same benefits as those in the insurance plans now gaining favor. But it would do so, according to its officers, at a lower cost to institutions and without the legal and other problems that they say could derail the insurance plans in the future.

The foundation's lawyer, Daniel Patterson, maintains that the insurance policies could be struck down in court because of the requirement that athletes who want benefits must waive their rights to sue. A spokesman for the Ruedlinger Insurance Company, which is offering the coverage, denies that the possibility of such court action exists.

Officials of the N.C.A.A. and the N.A.I.A. say they chose to begin negotiating for in-

Continued on Following Page

3 Collegians Among 20 Who Died from Football in 1982

MISSION, KAN.

Twenty amateur football players died during the 1982 season, after suffering injuries either directly or indirectly associated with the sport, a survey has found.

Three of the 20 who died were college players, according to the survey, which was sponsored by the National Collegiate Athletic Association, the American Football Coaches Association, and the National Federation of High School Associations.

Nine died as a direct result of playing football. Seven of the nine were high-school players; the other two played in organized youth leagues.

Eleven other deaths were so-called indirect fatalities—those caused by "systemic failure as a result of exertion while participating in football activity or by a complication that was secondary to a nonfatal injury." Of the 11 who died in this category, 3 were college players.

The survey was conducted by Frederick O. Mueller, professor of physical education at the University of North Carolina at Chapel Hill, and Richard D. Schindler, of the high-schools federation.

Most of the deaths resulted from injuries to the head, Mr. Mueller said.

Insurance *Continued from Preceding Page*

surance coverage instead of actively supporting the foundation because there were too many unanswered questions about how the foundation would operate and where its money would come from.

"The insurance program is a more viable program at the present time," said Frederick Mueller, professor of physical education at the University of North Carolina and a member of the N.C.A.A.'s Committee on Competitive Safeguards and Medical Aspects of Sports. "There have never been specific details as to how the foundation would proceed. It was never made clear exactly how they were going to raise all these millions of dollars."

John Black, a lawyer for the N.C.A.A. involved in the negotiations with the insurance companies, said, "There are no bad guys involved in this. We're all interested in figuring out what is the best solution to a problem that is in a way unsolvable. There will always be these injuries.

"But the N.C.A.A. didn't want to endorse a concept [the foundation] until it had seen the full picture. We don't know from the foundation what the cost to institutions would be. If they would give us a number it would be another story."

There are other "enormous questions" to be answered, he said, such as who would decide which students would get benefits and what the criteria for making that decision would be.

A vote by N.C.A.A. members would be required before the association could adopt the insurance policy or endorse the foundation idea.

Premiums to Average $5,000

Doug Ruedlinger, a veteran insurance broker from Topeka, Kan., is handling the policies being offered to members of N.A.I.A. and N.J.C.A.A., and he is negotiating with the N.C.A.A. to provide similar coverage. The premiums colleges will pay vary with the size of the institution but average around $5,000 a year, a Ruedlinger spokesman said.

In January, Mr. Ruedlinger's company also began offering insurance plans to the state associations that govern high-school athletics. By 1983-84, the company expects to have more than 38 state associations covered. A Ruedlinger spokesman said his company was the "front runner" among the insurance companies negotiating with the N.C.A.A.

Mr. Ruedlinger's insurance policies begin supporting catastrophically injured athletes once they have accrued $10,000 in medical bills, some or all of which may be paid by medical insurance policies. At that time, they may apply to the insurance company for benefits.

The company offers to pay the students' medical bills and the costs of rehabilitation therapy. It will also pay for modifying the athlete's home so that he can move around in it despite his handicap, and will buy him an automobile outfitted for his special needs. The company will also provide him with a lifelong income or supplement to his income, if his ability to provide for himself has been impaired by his injury.

In return for the benefits, the student must waive his right to sue his college for negligence in connection with his injury, as well as his right to sue the institution's personnel.

If the student decides to sue instead of taking the benefit package, the insurance company will pay the university's legal costs and any judgment against the institution or its personnel.

Officials of the Rehabilitation Foundation, however, say they've got a better deal to offer the colleges.

They want to raise between $20- and $30-million for an endowment, the interest income from which, they say, would provide the same benefits to injured athletes as Mr. Ruedlinger's company promises.

Most of that money would be raised from large corporations, including sports-equipment manufacturers and television broadcasters. The foundation, which has been financed until now by the makers of football helmets, would initially assist only football players, but would later help athletes injured in other sports, its officials say.

Football-helmet manufacturers are enthusiastic supporters of the foundation. Largely because of the threat of lawsuits, seven sporting-goods manufacturers have dropped helmets from their lines in recent years. The four remaining helmet-makers have found it virtually impossible to obtain insurance.

Permanent Cervical-Cord Injuries in Football

Year	High school	College	Total
1977	10	2	12
1978	12	0	12
1979	8	3	11
1980	10	2	12
1981	6	1	7
1982	7	2	9

SOURCE: FREDERICK MUELLER AND CARL BLYTH, U. OF NORTH CAROLINA

Under the foundation's proposed plan, the injured athletes would apply to the foundation for assistance, and those selected to receive benefits would have to waive their rights to sue their educational institution, its personnel, or the manufacturers of the sporting equipment they were using at the time of their injury. If the students were to reject the benefits and bring lawsuits, the parties being sued could apply to the foundation for funds to fight the suit and to pay any judgment against them.

Despite the interest that the college associations showed earlier, the foundation's officers say, they have declined to endorse the foundation and to help it raise money.

If the N.C.A.A., N.A.I.A., and N.J.C.A.A. would throw their support behind the foundation, said John Masick, one of its officers, "we could go to G.M., Xerox, and other corporations, and begin raising the money."

Instead, he said, the colleges are opting for a plan that is expensive, that could go out of existence if the insurance company were hit with too many claims in too short a time, and that may be legally unenforceable in some states. Mr. Patterson and Mr. Masick said their plan would be cheaper for educational institutions because corporate and other donors would foot most or all of the bills.

In addition, since the foundation would make no profit, Mr. Masick said, all of the money raised would be used to help injured athletes. With an insurance plan, he said, part of the money would go to the company in the form of profit.

The insurance policies now being offered provide no benefits until the student has spent $10,000 of his own. The foundation would make grants to beneficiaries without requiring them to spend such a sum.

Mr. Patterson, who is "on loan" to the foundation from the sporting-goods manufacturers he represents, also questions whether the company could withstand several large claims against it. "The company will exist until it gets hit three or four times," he predicts.

Finally, said Mr. Patterson, the way in which Mr. Ruedlinger asks injured athletes to waive their rights to sue could cause the policies to be struck down by some courts.

That is so, he said, because the insurance company is placing conditions on an individual's receiving benefits *after* a contract has been set up between the athlete and the company to provide such benefits.

Suing for Fraud

If an injured student came to him for advice on whether to take the benefits or sue, he said, he would advise him to do both, if a lawsuit for negligence were warranted.

"Then the student would sue the insurance company for fraud and for bargaining in bad faith," he said. "Somebody is going to do that," and the insurance company could be forced to suspend operations, he said.

Mark Nordstrom, vice-president for marketing at the Ruedlinger Company, denied that his firm runs the risk of having its policy struck down by a court or of being forced into bankruptcy.

What Mr. Patterson doesn't understand, he said, is that an educational institution, not an athlete, holds the insurance contract with his company. Therefore, he said, the company is obligated only to give the injured athlete the choice of retaining his right to sue or of getting benefits.

He added that the company's rate structure is prudent, insuring that the firm will not be forced out of business by too many claims.

"Every life-insurance policyholder at Aetna could die tomorrow and drive the company into bankruptcy," he said, "but it won't happen. It's the same in our case. We know how many debilitating accidents happen every year, and we're ready for them."

One issue that the N.C.A.A. must decide is whether to allow its members to sign up for the policy at their option, or to require the members who don't want the policy to "opt out" of the group-insurance plan.

There is some concern that an institution that opts out would leave itself open to claims of negligence if one of its athletes were injured. Sources say the college associations want to avoid the opt-out approach, but that insurance companies are reluctant to offer the policy on any other basis.

Sports Notes

U. of Baltimore Drops Intercollegiate Sports

In 1979 the University of Baltimore moved from the National Collegiate Athletic Association's Division II to its top competitive section, Division I. Now Baltimore has decided to reverse its priorities and drop intercollegiate sports entirely at the end of the academic year.

According to President H. Mebane Turner, the university will probably emphasize recreational sports, instead. Student interest in intercollegiate sports has been declining, Mr. Turner said, and "we have become increasingly aware that the recreational and leisure activity needs of our students are not being met."

The university, which does not enroll freshmen or sophomores, has said it will fulfill scholarship and salary commitments to students and staff members through the 1983-84 academic year.

U. of San Francisco Panel Wants Basketball Back

A committee appointed by President John J. Lo Schiavo has recommended that the University of San Francisco resume its intercollegiate basketball program, which was discontinued last summer after recruiting and scholarship-rules infractions were uncovered. Father Lo Schiavo declined to disclose details of the committee's recommendations, which he said were being reviewed. He said his own recommendation might be included as part of a five-year master plan that will be submitted to the university's trustees on June 10.

Father Lo Schiavo said university officials are studying financial requirements, the philosophy of recruiting, the role of booster organizations, and academic standards for athletes before deciding whether or not basketball competition should be resumed, possibly in 1984-85.

Basketball Coaches' Group to Run Officiating Clinics

In reaction to growing criticism of the performance of basketball referees, the National Association of Basketball Coaches has launched a program aimed at improving officiating in the sport.

The outgoing president of the association, Fred (Tex) Winter, said the coaches, with the help of athletic conferences, would sponsor clinics for referees at eight sites around the country this summer.

"We know that officiating a basketball game is difficult," said Mr. Winter, who has just retired as coach at California State University at Long Beach, "but it shouldn't be impossible."

The coaches' association would also like to take an active role in recruiting new referees. "Ideally, we'd like to get former players to become referees. If we can get them interested and make it worth their while, I think we'd have some good officials," Mr. Winter said.

Ohio, Pennsylvania Colleges Form New Sports Conference

Seven colleges known more for academics than for athletics have formed a new sports conference that will begin play in the 1984-85 academic year.

All the colleges are located in Ohio or Pennsylvania and are members of the National Collegiate Athletic Association's Division III. The conference will apply for N.C.A.A. recognition in that division.

The conference does not yet have a name. It will sponsor championships in all sports offered by five or more members.

Conference members are: Allegheny College, Case Western Reserve University, Denison University, Kenyon College, Oberlin College, Ohio Wesleyan University, and the College of Wooster.

Sports Calendar

MEETINGS

May 18-20—Sociology of sport: "Sport and Culture in the State Since Antiquity," meeting, Swiss Association of Applied Sport Sciences, Bern, Switzerland. Contact: ASAS, Postfach 165, 3000 Bern 9, Switzerland.

May 18-21—Sports medicine: Annual meeting, American College of Sports Medicine Montreal. Contact: Jane Shepard, ACSM, 1440 Monroe St., Madison, Wis. 53706.

May 28-30—Sport history: Meeting, North American Society for Sport History, Pennsylvania State University at Mont Alto, Mont Alto, Pa. Contact: Alan Metcalfe, Faculty of Human Kinetics, University of Windsor, Windsor, Ontario N9B 3P4.

May 28-31—Sport psychology: Annual meeting, North American Society for the Psychology of Sport and Physical Activity, Michigan State U., East Lansing, Mich. Contact: Deborah Feltz, Institute for the Study of Youth Sports, Women's Intramural Building, Michigan State University, East Lansing, Mich. 48824.

May 30-June 3—Athletics: Meeting, United States Olympic Academy, Texas Tech University, Lubbock, Tex. Contact: USOA VII, P.O. Box 4070, Texas Tech University, Lubbock, Tex. 79409; (806) 742-3335.

CHAMPIONSHIPS

May 6-7—Men's volleyball: National Collegiate Athletic Association, Columbus, Ohio.

May 7-8—Men's Lacrosse: National Junior College Athletic Association, Cobleskill, N.Y.

May 9-14—Women's tennis: National Collegiate Athletic Association, Division II, San Luis Obispo, Cal.

May 9-11—Slow-pitch softball: National Junior College Athletic Association, Hanceville, Ala.

May 9-14—Women's tennis: National Collegiate Athletic Association, Division III, Claremont, Cal.

May 9-15—Men's tennis: National Collegiate Athletic Association, Division III, Albany, N.Y.

May 9-15—Men's tennis: National Collegiate Athletic Association, Division II, San Marcos, Tex.

May 10-13—Women's tennis: National Junior College Athletic Association, Ocala, Fla.

May 14-22—Men's tennis: National Collegiate Athletic Association, Division I, Athens, Ga.

May 14-22—Women's tennis: National Collegiate Athletic Association, Division I, Albuquerque, N.M.

May 17-19—Women's golf: National Junior College Athletic Association, Palm Beach, Fla.

May 17-20—Men's golf: National Collegiate Athletic Association, Division II, California, Pa.

May 17-20—Men's golf: National Collegiate Athletic Association, Division III, Wooster, Ohio.

May 18-20—Fast-pitch softball: National Junior College Athletic Association, Rockford, Ill.

May 19-21—Men's and women's outdoor track: National Junior College Athletic Association, San Angelo, Tex.

May 20-22—Softball: National Collegiate Athletic Association, Division II, Orange, Cal.

May 21-22—Women's lacrosse: National Collegiate Athletic Association, Philadelphia, Pa.

May 21-24—Softball: National Collegiate Athletic Association, Division III, Willimantic, Conn.

May 21-25—Baseball: National Collegiate Athletic Association, Division II, Riverside, Cal.

May 22—Men's lacrosse: National Collegiate Athletic Association, Division III, site to be announced.

May 23-28—Men's and women's outdoor track: National Collegiate Athletic Association, Division III, Naperville, Ill.

May 23-28—Men's and women's outdoor track: National Collegiate Athletic Association, Division II, Cape Girardeau, Mo.

May 24-26—Softball: National Association of Intercollegiate Athletics, Kearney, Neb.

May 24-28—Men's tennis: National Junior College Athletic Association, Ocala, Fla.

May 25-28—Women's golf: National Collegiate Athletic Association, Athens, Ga.

May 25-29—Softball: National Collegiate Athletic Association, Division I, Omaha, Neb.

May 26-28—Men's and women's outdoor track: National Association of Intercollegiate Athletics, Charleston, W.Va.

Sports People

John Beilein, men's basketball coach at Nazareth College of Rochester, to men's basketball coach at Le Moyne College.

D. Robert Brown, assistant men's basketball coach at Boston U., to men's basketball coach at Saint Anselm College.

Robert E. Kramig, IV, women's soccer coach and assistant men's soccer coach at Morehead State U., to men's soccer coach at Miami U.

Stuart Starner, assistant men's basketball coach at U. of Minnesota, to men's basketball coach at Montana State U.

Steve Townsend, editor of *Tiger Rag*, a Baton Rouge, La., sports newspaper, to assistant commissioner for public relations of the Southeastern Conference.

Bill Trumbo, men's basketball coach at Santa Rosa Junior College, to men's basketball coach at U. of Idaho.

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News Summary

Articles on inside pages

WIDE WORLD

France moved last week to quell student unrest sparked by plans to reform higher education there. (Policeman above tangles with a Parisian law student.) Story on Page 25.

Jaroslav Pelikan, a specialist in the history of Christian doctrine, is this year's Jefferson Lecturer. Interview on Page 4.

Recruiting and admissions are costing colleges more money. Story on Page 7.

Derek C. Bok, president of Harvard University, has called for changes in the legal system and the law-school curriculum. Story on Page 8.

The Reagan Administration has been hit by two new controversies over its position on civil rights. Story on Page 17.

A federal judge is expec[illegible] decide soon whether students w[illegible] transfer should be allowed to par[illegible]pate in college sports immediately after the change. Story on Page 2[illegible]

Slavic studies are in decline, but the publication of new books and journals on the subject is going strong. Story on Page 31.

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The National Commission on Excellence in Education:

"OUR NATION IS AT RISK.

"Our once unchallenged preeminence in commerce, industry, science, and technological innovation is being overtaken by competitors throughout the world. . . .

"While we can take justifiable pride in what our schools and colleges have historically accomplished and contributed to the United States and the well-being of its people, the educational foundations of our society are presently being eroded by a rising tide of mediocrity that threatens our very future as a nation and a people. What was unimaginable a generation ago has begun to occur—others are matching and surpassing our educational attainments.

"If an unfriendly foreign power had attempted to impose on America the mediocre educational performance that exists today, we might well have viewed it as an act of war. As it stands, we have allowed this to happen to ourselves. We have even squandered the gains in student achievement made in the wake of the Sputnik challenge."

The text of the commission's report begins on Page 11.

Iran's Request for List of Students Rejected by U.S. Universities

By MALCOLM G. SCULLY

WASHINGTON

American colleges and universities have indicated that they will not comply with a request from the government of Iran for a list of all of their Iranian students "with their major fields of study and their addresses, particularly those who will be graduating soon."

A spokesman at the National Association for Foreign Student Affairs said last week said that the association knew of no college or university that had complied with the request. Foreign-student advisers often receive similar requests and routinely turn them down, the spokesman added.

"There are other requests from embassies, prospective employers, even reporters," she said. "Institutions generally do not provide that kind of information on their students."

The American Council on Education, after consulting with N.A.F.S.A. and the American Association of Collegiate Registrars and Admissions Officers, told its members last week that the "Buckley Amendment," officially known as the Family Educational Rights and Privacy Act, "specifically bars the release of the information requested."

The request for the list was sent to foreign-student advisers at the U.S. institutions by the Embassy of Algeria, which has represented Iranian interests in the United States since the two countries severed diplomatic relations in 1981.

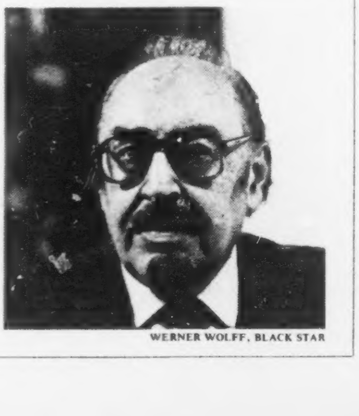
The request said the list "will serve students in several ways. For example, it facilitates the financial aid needed for their educational expenditures, their round-trip tickets to visit their families, and location of their future careers."

According to the Institute of International Education, the 35,680 Iranians enrolled at American colleges in 1981-82 made up the largest group of foreign students in the United States. However, the number has been declining since 1979.

When Colleges Force Professors to Retire

In a conflict between individuals' rights and institutions' needs, academe is debating whether colleges should be able to tell tenured professors when to retire. For Saul Levine (right), a former professor of art history, forced retirement was traumatic.

See the Personal & Professional Section, beginning on Page 27.



WERNER WOLFF, BLACK STAR

Raise Standards of Admission, Colleges Urged

Commission seeks to halt 'rising tide of mediocrity'

By JANET HOOK

WASHINGTON

Colleges and universities should raise their admissions standards to help turn back a "rising tide of mediocrity" that has undermined the quality of American education over the last two decades, a national commission recommended last week.

In a report submitted to President Reagan after more than a year of study, the National Commission on Excellence in Education called for tougher requirements for high-school graduation, higher salaries for teachers, and new incentives to attract academically gifted students into the teaching profession.

Community colleges should tighten their requirements for the associate degree, educators believe. Story on Page 10.

Offering a bleak diagnosis of the state of American schools and colleges, the 36-page report said the United States had lost its international preeminence in education after having "squandered the gains in student achievement made in the wake of the Sputnik challenge."

The commission's recommendations for upgrading academic standards were strongly endorsed by Education Secretary Terrel H. Bell, who appointed the 18-member panel of educators in August, 1981.

"This report is particularly well received because it offers a blueprint for educational renewal," Secretary Bell said.

Although the commission's recommendations were applauded by many education groups, some critics contended that they sidestepped some of the most difficult questions facing educators and policymakers.

"As a discussion document it's first-rate," said Rep. Paul Simon, Democrat of Illinois and chairman of the House Subcommittee on Postsecondary Education. "But as a blueprint for meaningful action

Continued on Page 10, Column 4

The Cost of Recruiting a Student Is on the Rise, Survey Finds

By BEVERLY T. WATKINS

Colleges and universities are spending more money to recruit and admit undergraduates and, on some campuses, are getting fewer new students for the dollar, a survey commissioned by *The Chronicle* has found.

The survey found that the average institution of higher education budgeted $298,439 in 1982-83 for admissions and recruiting. That was an 8-per-cent increase over the previous year and a 23-per-cent increase over 1980-81.

The survey found that the average cost of recruiting and admitting one student had risen from $128 in 1980-81 to $151 in 1981-82. Expenditures per student in 1982-83 are not available because next fall's classes are not yet complete.

J. Douglas Conner, executive secretary of the American Association of Collegiate Registrars and Admissions Officers, attributed the increased costs to the higher price of doing business and to the decreasing size of the traditional applicant pool.

Spending More for Postage

"Today, more institutions are into direct mail for recruiting," he said. "The increasing cost of postage and printing means that the cost of recruiting will go up."

The survey found that colleges had spent more on postage and printing in 1981-82 than they did in 1980-81 and that they had budgeted further increases for the current academic year.

Also, Mr. Conner noted, "Fewer students are reaching high-school age, so there is less in terms of volume to work with. If you have less volume, you are spending more money but finding less yield in terms of applications.

"The private institutions in particular are having to make more contacts because of the diminishing pool of 18-to-22-year-olds."

Some institutions, such as public and private research universities and private comprehensive colleges, reported that the average number of applications they received for 1982-83 had decreased by between 1.5 and 3 per cent from the previous year's.

Some public research universities may be receiving fewer applications because they have "purposely reduced their enrollments in some programs and limited them in others," Mr. Conner said.

$709 per Student

The survey, which was conducted for *The Chronicle* by John Minter Associates, collected data from a stratified random sample of 300 public and private two-year and four-year colleges and universities across the country.

Recruiting and admissions costs, as defined in the survey, include the salaries of admissions directors, counselors, and other staff members, as well as expenditures for travel, telephone, printing, supplies, postage, and other items.

The survey found that the average admissions office employed the full-time equivalent of about 15 administrators, counselors, and clerks.

The survey response indicated that research universities spend the most on admissions. For 1982-83 the average private university budgeted $675,721; the average public university, $576,937.

Selective liberal-arts colleges spent the most per student, an average of $709 in 1981-82.

The survey found that private comprehensive colleges budgeted an average of $397,317 for admissions this year, an increase of about 7 per cent. Their public counterparts averaged $243,783, an increase of about 10 per cent.

The cost per student varied widely at such institutions: The private colleges averaged $455, while the public colleges spent $64. Only the public two-year colleges spent less per student—$47.

Private two-year colleges spend the least money on admissions, the survey found, with an average of $127,937 budgeted for this year. The cost per student, however, amounted to $335.

The average number of applications received from potential freshmen and transfer students decreased by 2 per cent at the private research universities—from 6,139 in 1981-82 to 6,008 in 1982-83—and by almost 1.5 per cent at the public universities—from 10,486 to 10,344.

Applications dropped by more than 3 per cent at the private four-year colleges—from 2,173 to 2,106—but registered a small increase at the public four-year institutions.

Among the two-year institutions, the average number of applications increased from 639 in 1981-82 to 677 in 1982-83 at the private colleges, a gain of 6 per cent, and from 7,883 to 8,004 at the public institutions, an increase of 1.5 per cent.

CHRONICLE SURVEY

College Resources for Admissions and Recruiting

Expenditures	1980-81		1981-82		1982-83 (a)
	Per institution	Per new student (b)	Per institution	Per new student (b)	Per institution
SALARIES					
Public research universities	$389,850	$ 81.00	$423,522	$ 91.00	$456,453
Private research universities	285,124	175.00	335,417	214.00	385,299
Public comprehensive colleges (c)	151,458	43.00	167,410	49.00	184,297
Private comprehensive colleges (c)	164,357	187.00	188,077	229.00	206,189
Selective liberal-arts colleges	163,104	302.00	188,746	357.00	206,652
Other liberal-arts colleges	94,062	212.00	109,191	254.00	120,734
Public 2-year institutions	191,066	34.00	208,843	39.00	219,735
Private 2-year institutions	48,022	138.00	63,191	177.00	66,776
All institutions	**$175,801**	**$ 78.00**	**$194,714**	**$ 92.00**	**$209,621**
TRAVEL					
Public research universities	$12,927	$ 2.80	$13,687	$ 3.11	$15,769
Private research universities	42,757	26.18	51,704	33.00	96,021
Public comprehensive colleges (c)	4,414	1.37	6,019	1.85	6,440
Private comprehensive colleges (c)	33,348	37.96	35,927	43.83	37,913
Selective liberal-arts colleges	41,975	77.75	45,690	86.50	51,979
Other liberal-arts colleges	25,110	56.71	30,992	72.03	29,597
Public 2-year institutions	5,370	0.79	7,427	1.16	5,094
Private 2-year institutions	10,025	28.87	14,087	39.50	14,556
All institutions	**$ 9,806**	**$ 8.76**	**$12,246**	**$10.97**	**$ 9,022**
POSTAGE					
Public research universities	$31,543	$ 7.00	$38,374	$ 8.00	$34,668
Private research universities	33,070	22.00	39,726	27.00	46,917
Public comprehensive colleges (c)	10,186	3.00	11,479	3.00	11,559
Private comprehensive colleges (c)	25,732	34.00	33,330	47.00	38,014
Selective liberal-arts colleges	23,844	47.00	31,114	63.00	30,819
Other liberal-arts colleges	15,147	29.00	19,916	39.00	18,131
Public 2-year institutions	23,752	4.00	29,967	5.00	28,769
Private 2-year institutions	4,921	13.00	4,996	13.00	7,761
All institutions	**$17,950**	**$ 8.78**	**$22,062**	**$17.64**	**$22,591**
PRINTING					
Public research universities	$31,576	$ 6.62	$33,794	$ 7.44	$33,073
Private research universities	49,342	35.05	61,892	45.01	69,620
Public comprehensive colleges (c)	7,786	2.09	9,632	2.66	10,182
Private comprehensive colleges (c)	42,145	46.21	46,706	54.40	51,089
Selective liberal-arts colleges	36,783	68.13	42,042	79.59	48,901
Other liberal-arts colleges	19,088	43.11	24,963	58.02	27,114
Public 2-year institutions	9,440	1.81	12,241	2.50	15,883
Private 2-year institutions	12,991	37.42	11,835	33.19	21,008
All institutions	**$14,048**	**$12.12**	**$16,565**	**$14.06**	**$19,405**
SUPPLIES					
Public research universities	$12,936	$ 2.71	$13,947	$ 3.06	$15,514
Private research universities	10,297	6.79	13,694	9.39	16,509
Public comprehensive colleges (c)	10,952	3.36	11,478	3.54	11,856
Private comprehensive colleges (c)	15,393	18.16	20,638	26.17	17,201
Selective liberal-arts colleges	7,996	14.23	11,282	20.39	11,717
Other liberal-arts colleges	7,706	16.49	8,546	18.93	10,806
Public 2-year institutions	7,878	1.38	8,164	1.54	9,817
Private 2-year institutions	2,599	7.49	2,734	7.67	4,337
All institutions	**$ 8,955**	**$ 4.71**	**$ 9,627**	**$ 5.43**	**$10,804**
TELEPHONE					
Public research universities	$11,649	$ 2.44	$12,797	$ 2.82	$12,454
Private research universities	8,498	5.60	11,381	7.81	12,451
Public comprehensive colleges (c)	2,994	0.91	3,239	0.99	3,412
Private comprehensive colleges (c)	7,448	7.50	8,290	8.98	8,669
Selective liberal-arts colleges	4,764	8.59	5,324	9.73	5,535
Other liberal-arts colleges	7,662	15.32	9,026	18.48	9,395
Public 2-year institutions	28,749	8.88	32,047	9.73	36,180
Private 2-year institutions	3,502	8.83	4,220	10.74	3,840
All institutions	**$13,758**	**$ 6.30**	**$15,381**	**$ 7.20**	**$16,905**
TOTAL COSTS					
Public research universities	$523,137	$112.00	$534,859	$118.00	$576,937
Private research universities	503,076	308.00	586,163	374.00	675,721
Public comprehensive colleges (c)	207,439	59.00	221,845	64.00	243,783
Private comprehensive colleges (c)	320,369	365.00	372,773	455.00	397,317
Selective liberal-arts colleges	318,558	590.00	374,575	709.00	412,488
Other liberal-arts colleges	168,545	381.00	205,537	478.00	215,363
Public 2-year institutions	265,868	41.00	291,836	47.00	311,328
Private 2-year institutions	97,475	281.00	119,514	335.00	127,937
All institutions	**$243,442**	**$128.00**	**$276,672**	**$151.00**	**$298,439**

Staff members	1981-82	
	Number of staff members	New students (b) per staff member
PROFESSIONAL EMPLOYEES		
Public research universities	9.5	544
Private research universities	4.0	1,000
Public comprehensive colleges (c)	8.7	167
Private comprehensive colleges (c)	6.9	115
Selective liberal-arts colleges	5.9	90
Other liberal-arts colleges	4.8	81
Public 2-year institutions	3.8	2,505
Private 2-year institutions	3.5	89
All institutions	**6.0**	**1,036**
CLERICAL STAFF		
Public research universities	15.5	332
Private research universities	6.2	640
Public comprehensive colleges (c)	11.6	125
Private comprehensive colleges (c)	4.9	162
Selective liberal-arts colleges	5.7	94
Other liberal-arts colleges	2.4	163
Public 2-year institutions	8.7	1,109
Private 2-year institutions	1.7	184
All institutions	**8.8**	**514**
STUDENT STAFF (d)		
Public research universities	4.4	1,175
Private research universities	1.9	1,923
Public comprehensive colleges (c)	8.3	186
Private comprehensive colleges (c)	3.8	211
Selective liberal-arts colleges	2.1	252
Other liberal-arts colleges	1.9	215
Public 2-year institutions	1.2	5,370
Private 2-year institutions	1.6	200
All institutions	**3.8**	**2,173**

Volunteers	Number of volunteers	New students (b) per volunteer
STUDENT VOLUNTEERS (d)		
Public research universities	1.0	5,791
Private research universities	2.2	1,873
Public comprehensive colleges (c)	14.0	103
Private comprehensive colleges (c)	1.2	612
Selective liberal-arts colleges	1.0	520
Other liberal-arts colleges	0.9	528
Public 2-year institutions	4.5	1,299
Private 2-year institutions	—	—
All institutions	**6.1**	**1,155**
FACULTY & STAFF VOLUNTEERS (e)		
Public research universities	1.0	4,225
Private research universities	1.4	3,017
Public comprehensive colleges (c)	3.4	378
Private comprehensive colleges (c)	1.2	610
Selective liberal-arts colleges	0.5	1,018
Other liberal-arts colleges	0.8	971
Public 2-year institutions	0.9	11,180
Private 2-year institutions	0.5	692
All institutions	**1.6**	**4,772**
ALUMNI VOLUNTEERS (e)		
Public research universities	0.6	8,944
Private research universities	2.2	2,014
Public comprehensive colleges (c)	2.8	568
Private comprehensive colleges (c)	2.0	345
Selective liberal-arts colleges	2.9	185
Other liberal-arts colleges	0.9	702
Public 2-year institutions	—	—
Private 2-year institutions	0.6	666
All institutions	**1.2**	**1,206**

(a) Figures for 1982-83 are budgeted amounts.
(b) A new student is defined as a freshman or a transfer.
(c) Institutions with more than 1,500 students, a liberal-arts program, and at least one professional program.
(d) One full-time equivalent is 1,400 hours annually.
(e) One full-time equivalent is 1,900 hours annually.
— Insufficient data.

SOURCE: SURVEY FOR THE CHRONICLE BY JOHN MINTER ASSOCIATES

AT&T to Set Up New Foundation by End of Year

NEW YORK

Plans are under way at the American Telephone and Telegraph Company to establish a new philanthropic foundation before next January 1, when A.T. & T. will be divested of its local telephone companies.

The foundation would combine the philanthropic efforts of A.T. & T., its research arm, Bell Laboratories, and its manufacturing subsidiary, Western Electric.

Reports that the foundation would start with an endowment of $100-million, making it one of the largest company-sponsored foundations in the country, were denied by A.T. & T. officials.

Robert H. Thill, A.T. & T.'s division manager in charge of corporate contributions, said that while such an estimate was not unreasonable, plans for the foundation have not yet received final approval.

He said the new foundation could be expected to continue A.T. & T.'s "strong emphasis" on engineering and science at colleges and universities.

In 1982 A.T. & T.'s philanthropic giving totaled about $8-million; Bell Laboratories', about $4.5-million; and Western Electric's, about $7-million, Mr. Thill said. —J.M.

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News Summary

Articles on inside pages

An investment expert has advised colleges to offer alternatives to the employee pension plans administered by T.I.A.A. and C.R.E.F. Story on Page 21; list of C.R.E.F. investments on Pages 22-25.

KEN HEYMAN

Margaret Mead (above) and her work in Samoa have come under renewed attack, forcing many reluctant scholars to defend her contributions to the field. Story on Page 27.

A House committee refused to yield to university lobbyists and delete provisions regarding the use of research animals from a bill to reauthorize N.I.H. activities. Story on Page 13.

Recent studies have shown that many varsity athletes—particularly black football and basketball players—are experiencing serious academic difficulty. Stories on Page 17.

Hugh Trevor-Roper, the British historian, has been criticized by colleagues for his controversial role in the publication of diaries allegedly written by Adolf Hitler. Story on Page 19.

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Report on Excellence in Education Acclaimed; Panelists Criticize Reagan's Interpretation

In radio speech, President said more federal funds for education 'are not the answer'

WASHINGTON

A national commission's report calling for an upgrading of academic standards in American schools and colleges has received wide acclaim, but policymakers and educators have drawn very different conclusions about what the federal government's role should be.

President Reagan said the call by National Commission on Excellence in Education "for an end to federal intrusion is consistent with our task of redefining the federal role in education."

But David P. Gardner, president of the University of Utah and chairman of the panel, said the President "misstated the focus" of the report's comment on the federal role in education.

Two more reports called for changes in the country's education system last week:

- A Twentieth Century Fund panel urged the federal government to do more. Story and excerpts begin on Page 5.
- A group of prominent citizens warned that poor education threatens the nation's economic well-being. Story on Page 10.

The reforms recommended by the commission have been interpreted by many educators, including some members of the panel itself, as requiring increased federal support. And that view has already found support on Capitol Hill.

Sen. Ernest F. Hollings, Democrat of South Carolina, cited the commission's emphasis on education as "a critical national priority" as he sought to add $1.5-billion for education to the 1984 budget. However, it was unclear last week whether the Senate would approve any extra funds.

President Reagan, commenting on the report in a radio speech, drew a different conclusion from the commission's statement that "a rising tide of mediocrity" has underminded the quality of American education over the last 20 years.

"Those were the years when the federal presence in education grew and grew," Mr. Reagan said. "There are things the federal government can and must do to insure educational excellence, but bigger budgets are not the answer."

In its final report, the commission painted a bleak picture of the deteriorating qual-

Continued on Page 10, Column 2

Raising College Standards Is Already 'In the Works'

By MALCOLM G. SCULLY

Last month, trustees of the University of Arkansas at Fayetteville adopted tougher admissions standards for entering freshmen, starting in academic 1985-86.

This month, trustees of the California State University system will vote on a proposal to stiffen requirements for students entering and completing teacher-education programs on the system's 19 campuses.

The requirements are designed, a system spokesman said, to assure that future teachers "demonstrate competency in the subject-matter field and college-level proficiency in written and verbal communication, mathematical reasoning, computation, and reading."

The actions in Arkansas and California are not unique. For at least five years, colleges and universities have been raising their standards for admission and adopting measures that they hope will improve the quality of their teacher-education programs.

The need for such reforms was emphasized in the recent report of the National Commission on Excellence in Education.

In the view of many higher-education observers, however, the commission did not chart a new course for colleges and universities. But it did provide a highly visible endorsement of a movement that has been going on for some time.

The commission's report is "outdated in some respects," said Ernest L. Boyer, president of the Carnegie Foundation for the Advancement of Teaching. "In discussing many of the areas of reform, the commission is simply affirming what has been in the works for several years."

In recent developments, higher college-entrance standards have been adopted at all public colleges and universities in Maryland and at the nine campuses of the University of California.

In Maryland, trustees of the state's colleges and universities have specified that,

Continued on Page 10, Column 1

Colleges Woo Brightest Students with Academic Scholarships

Scarcity of top test-scorers leads to competition for them

By JANET HOOK

"I went mad with glee."

That's how Ben Weinberg, a high-school senior in Denver, describes his reaction last month to the news that he had been awarded a college scholarship worth $16,000 over the next four years because, put simply, he's smart.

A finalist in the competition for National Merit Scholarships, bearing a sterling high-school record and scores of 740 and 760 (out of a possible 800) on the Scholastic Aptitude Test, Mr. Weinberg has been offered the $4,000-a-year scholarship by Brandeis University—even though his family makes too much money for him to qualify for aid based on financial need.

Like other high-school students with an outstanding academic record, Mr. Weinberg has for the last year found his mailbox stuffed with letters from colleges, including Princeton and Stanford Universities, urging him to apply.

But after being offered the academic scholarship from Brandeis—and after a visit to the campus last March in which he was showered with attention from faculty members, administrators, and students—Mr. Weinberg decided to attend Brandeis next fall without even waiting to hear about the status of his application to Har-

Continued on Page 12, Column 1

U.S. Aid to Black Colleges Up $19.6-Million

By CHARLES S. FARRELL

WASHINGTON

Education Secretary Terrel H. Bell last week gave the Reagan Administration an A for its commitment to historically black colleges and universities.

In the first report on the executive order that President Reagan issued in 1981 directing government agencies to improve the participation of black colleges in federal programs, Mr. Bell said 27 agencies had exceeded their goals.

More than 100 historically black colleges received $564.5-million in federal grants

Continued on Page 16, Column 1

JOHN C. PHILLIPS

Secretary Bell at press conference

'In' Box

An inevitable by-product of the growth of information technology in higher education is a corresponding need for a special kind of nontechnical information: ideas and tips about who is doing what, and which colleges and other institutions may already have resources, projects, and expertise that others could share.

Enter Gisela Hoelzl, a self-described "walking Rolodex," and the Communications Consortium, Inc., of which she is the executive director and—so far—sole employee. Founded in 1981 but just now getting fully under way, the consortium is an independent nonprofit group of about 50 colleges, universities, libraries, museums, public broadcasters, and other nonprofit organizations—mostly in the Boston area--that is trying to become a model network for the exchange of information about communications technology.

It has a three-year grant of $133,100 from the federal Fund for the Improvement of Postsecondary Education, and is otherwise supported by dues (which for 1983-84 will range up to $400 a year, depending on the size of members' budgets).

Ms. Hoelzl says that today the consortium is unique, although she expects that similar ventures will follow. For information on membership (which is not restricted geographically) and a copy of the newly published *Resource Catalog / 1983* ($20 for members and $50 for nonmembers; add $1 for postage and handling), write to The Communications Consortium, Room 9-323, Massachusetts Institute of Technology, Cambridge, Mass. 02139; (617) 253-7432.

•

What is the fairest way to determine yearly raises for the members of an academic department? Assuming that the department has a given sum for all salary increments and that it wants to base them on merit, should the raises be:

- ▶ The same percentage for all those with equal merit and experience?
- ▶ The same amount for all those with equal merit and experience? Or,
- ▶ Relatively larger amounts for those earning less than others with the same merit and experience?

A study by Michael H. Birnbaum, professor of psychology at the University of Illinois at Urbana–Champaign, found that most faculty members and students tended to perceive salary equity in terms of how much equally deserving people are paid overall, rather than how large their raises may be in a given year.

The study's participants, about 20 faculty members and nearly 200 undergraduates in psychology at Illinois, thus seemed to prefer giving larger raises to those with lower salaries, Mr. Birnbaum says, so that eventually those with equal merit would be receiving equal pay.

The psychologist discussed the study and its results in a recent issue of the *Journal of Applied Psychology*. Requests for reprints of his article may be sent to him at the Department of Psychology, University of Illinois, 603 East Daniels Avenue, Champaign, Ill. 61820.

Personal & Professional

TIAA-CREF Pensions Challenged Anew; Time for 'Reassessment,' Companies Say

By ROBERT L. JACOBSON

WASHINGTON

In a widely circulated attack on higher education's principal retirement program, an academic expert on pensions and investment policy has advised colleges and universities to offer their employees alternatives to pension plans administered by the Teachers Insurance Annuity Association and the College Retirement Equities Fund.

The expert, Roy A. Schotland, professor of law at the Georgetown University Law Center, made his recommendation in a 14-page analysis of T.I.A.A. and C.R.E.F. in the May issue of *Business Officer*, the monthly magazine of the National Association of College and University Business Officers.

He charged that the sister pension companies, through "inferior" investment performance and a "lack of flexibility," were reducing both the retirement security of participants and the effectiveness of payments that colleges make on their behalf.

He said the companies, whose combined assets exceed $25-billion, have a "monopoly in higher education [that] has not served participants well."

About 350,000 faculty members and other employees at about 1,500 colleges and universities participate in T.I.A.A. and C.R.E.F. plans, which provide "fixed" or "variable" annuities built on contributions from both the employees and their institutions.

Companies Defend Performance

In a response to Mr. Schotland's article, published in the same issue of the business officers' magazine, T.I.A.A. and C.R.E.F. acknowledged that major changes in the economy over the past decade made it seem appropriate now for a "comprehensive reassessment of the future pension needs of educators and their employing institutions." But the companies defended their investment performance and said that many statements in Mr. Schotland's article were incorrect or misleading.

In broad terms, the published exchange did not raise much that was new in the debate over T.I.A.A. and C.R.E.F., which has attracted growing interest in higher education, particularly in the past two years. Some colleges and universities—Mr. Schotland placed the number at about 30—have already expanded their employees' pension options, mainly through the addition of mutual funds managed by other companies.

But while the law professor's indictment of T.I.A.A. and C.R.E.F. was largely an extension of charges that he and others had made before, its publication by higher education's chief organization of financial administrators—though without its endorsement—seemed destined to add substantial impetus to the movement to explore other retirement programs.

CHRONICLE PHOTOGRAPH BY JOHN C. PHILLIPS

Roy A. Schotland of Georgetown U. says T.I.A.A.-C.R.E.F.'s "monopoly" has not served participants well.

Further national attention to the issue is likely. Several foundations, including the Carnegie Corporation of New York and the Ford Foundation, as well as several national organizations in higher education, have been discussing plans for a comprehensive study of retirement programs for higher education.

Many of Mr. Schotland's criticisms were accompanied by data, which he said had been verified by the T.I.A.A.-C.R.E.F. staff, that cast the companies in a comparatively unfavorable light.

One set of statistics indicated that a hypothetical T.I.A.A. account had lost 42 per cent of its purchasing power from 1973 to 1982 (after adjustments for inflation), while a comparable C.R.E.F. account had lost 56 per cent in the same period.

Another table showed that C.R.E.F.'s average annual return over the past 10 years was 5 per cent, compared with 6.4 per cent for Standard & Poor's index of 500 stocks (after reductions for the costs of running an investment fund), and with a median return of 5.4 per cent for 2,800 equities funds indexed by A. G. Becker & Company, a leading performance-evaluation service.

A list of C.R.E.F.'s investments of pension funds in common stocks and securities in 1981 and 1982 begins on Page 22.

Even for the past few years alone, when C.R.E.F.'s returns were close to those of Standard & Poor's index, its earnings were outpaced by other indexes, Mr. Schotland reported. Although the retirement fund's investments have gained substantially in recent months, as has the rest of the market, he said there were "no signs that the future [for C.R.E.F.] will be more than marginally better, if that."

The past two years have been "relatively strong" for C.R.E.F., he noted, yet 54 per cent of the other pension funds outperformed it for the last 3 years, 61 per cent did so for the last 5 years, and 60 per cent for the last 10 years.

Mr. Schotland's charge that T.I.A.A. and C.R.E.F. were inflexible centered on their policy of prohibiting participants from cashing in their annuities for tax-free "rollovers" into other retirement accounts. Those restrictions, along with limits on transfers between accounts, constitute a "unique lock-in of participants," he said.

Outsiders Have 'More Incentive'

He noted that participants could transfer money from C.R.E.F. to T.I.A.A., but only between age 55 and retirement, and that at no time were they permitted to switch T.I.A.A. money into the more volatile accounts managed by C.R.E.F.

Observing that participants may freely allocate new contributions to T.I.A.A. or C.R.E.F., he argued that the companies' policies were inconsistent and that their limitations on transfers were interfering with an option that investment professionals consider "the most important."

In all, Mr. Schotland's analysis amounted to the most comprehensive public criticism of T.I.A.A. and C.R.E.F. to date.

The association of business officers did not take an official position in the dispute. It said in a preface to Mr. Schotland's article and the T.I.A.A.-C.R.E.F. response that their publication in *Business Officer* did not "signify acceptance or endorsement."

The magazine has a circulation of about 13,000, according to its editor, Jeffrey M. Sheppard. Reprints of the two articles combined cost $1, with a minimum order of $5. Write to NACUBO Order Desk, One Dupont Circle, Suite 510, Washington 20036. For prices on bulk orders, call (202) 861-2532.

Some of Mr. Schotland's findings were reported in *The Chronicle* last fall ("Competition for TIAA-CREF Pensions: Some Colleges Offering Mutual Funds," November 24). Letters to the editor from Thomas C. Edwards, chairman of T.I.A.A. and C.R.E.F., and Mr. Schotland, were published December 8.

In addition to challenging C.R.E.F.'s investment performance, Mr. Schotland's article strongly criticized T.I.A.A. and C.R.E.F. for allowing annuitants "nothing more than token participation in the governance of their funds." He also took C.R.E.F. to task for using only "internal" investment managers—a practice he labeled "almost unique in America."

No Switches to CREF

Mr. Schotland suggested that C.R.E.F.'s record would be stronger if the company used outside managers as well. Such people "tend to have more incentive to perform than inside employees," he said.

"We would do better," he added in an interview, "with a dart board and mutual funds."

The published response by T.I.A.A. and

Continued on Page 25, Column 1

FACT-FILE

CREF's Investment Record in 1981 and 1982

Following is a list of investments of pension funds by the College Retirement Equities Fund, in common stocks and securities convertible into common stocks, showing the number of shares held and the market value at the end of 1981 and 1982 calendar years.

	December 31, 1982		December 31, 1981	
	Shares	Market value	Shares	Market value
Aerospace				
Barry Wright	35,000	$ 691,250	—	—
Boeing	1,084,700	36,744,213	685,000	$15,412,500
Cessna Aircraft	395,910	9,353,374	568,510	12,365,093
E-Systems	30,000	1,507,500	—	—
Fairchild Industries	489,300	7,094,850	—	—
Flight Safety International	60,000	1,372,500	—	—
Gates Learjet	42,000	504,000	—	—
General Dynamics	308,000	10,164,000	—	—
Grumman	27,500	1,326,875	—	—
Hexcel	150,000	2,925,000	—	—
Lockheed	40,000	2,930,000	—	—
Loral	35,000	1,448,125	—	—
McDonnell Douglas	277,800	11,667,600	—	—
Northrop	35,000	2,638,125	—	—
Raytheon	733,510	32,824,572	733,510	27,414,936
Sanders Associates	17,500	1,080,625	—	—
Wyman-Gordon	35,000	892,500	—	—
Subtotals		**$125,165,109**		**$55,192,529**
Air transport				
Alaska Airlines	100,000	$ 1,325,000	—	—
AMR	250,000	6,187,500	—	—
Delta Airlines	320,000	14,160,000	300,000	$ 7,350,000
Emery Air Freight	25,000	390,625	—	—
Federal Express	160,000	11,880,000	—	—
Northwest Airlines	200,000	9,400,000	200,000	5,400,000
Southwest Airlines	30,000	1,597,500	—	—
UAL	139,300	4,631,725	—	—
U.S. Air	20,000	665,000	—	—
Subtotals		**$50,237,350**		**$12,750,000**
Aluminum and other nonferrous metals				
Alcan Aluminium	3,103,437	$ 86,508,306	2,935,000	$67,505,000
Aluminum Company of America	1,050,000	32,550,000	1,050,000	26,906,250
AMAX	496,992	10,809,576	215,600	10,187,100
ASARCO	96,000	2,796,000	—	—
Dome Mines	132,400	2,052,200	100,000	1,525,000
Freeport-McMoran	150,300	2,461,163	—	—
Handy & Harman	20,000	392,500	—	—
Homestake Mining	42,300	2,342,363	—	—
Inco	1,179,087	13,854,272	716,113	10,204,619
Inco Warrants	50,000	190,650	—	—
International Aluminum	37,800	722,925	—	—
Kaiser Aluminum & Chemical	1,875,384	28,374,258	1,875,984	28,608,756
Mapco	90,000	2,115,000	—	—
Martin Marietta	—	—	900,000	32,400,000
Newmont Mining	165,000	9,075,000	40,000	1,725,000
Phelps Dodge	161,500	4,542,187	122,500	4,119,063
Phibro-Salomon	725,600	35,917,200	100,000	2,600,000
Pittston	229,300	3,152,875	—	—
Reynolds Metals	856,400	21,731,150	856,400	20,553,600
$4.50 cum. conv. 2nd pfd. B	21,000	1,155,000	21,000	1,050,000
Subtotals		**$260,742,625**		**$207,384,388**
Banks				
Allied Bancshares	73,000	$ 2,153,500	—	—
BankAmerica	1,350,000	27,168,750	1,450,000	$ 30,812,500
Barnett Banks of Florida	70,000	1,890,000	28,500	648,375
$2.375 cum. Conv. pfd. A	41,400	1,304,100	—	—
Chase Manhattan	759,978	37,238,922	400,00	21,550,000
Citicorp	1,789,000	58,142,500	2,204,000	55,651,000
Citizens and Southern Georgia	195,000	2,071,875	—	—
Continental Illinois	942,000	19,193,250	377,000	12,488,125
First Chicago	281,380	5,100,013	570,000	10,972,500
First City Bancorporation of Texas	101,000	2,222,000	—	—
First Interstate Bancorporation	396,503	12,440,282	—	—
InterFirst	167,400	3,871,125	—	—
Irving Bank	35,000	1,439,375	—	—
Manufacturers Hanover	241,000	10,031,625	586,000	20,876,250
Marine Midland Banks	25,000	468,750	—	—
Mercantile Texas	267,033	7,009,616	448,971	13,525,279
J.P. Morgan	259,173	17,494,177	255,700	13,743,875
Northwest Bancorporation	138,000	3,398,250	58,000	1,377,500
Pittsburgh National	10,000	320,000	—	—
Provident National	40,000	1,265,000	—	—
Rainier Bancorporation	25,000	693,750	—	—
Republicbank	35,000	1,058,750	—	—
Seafirst	262,700	4,367,388	—	—
Security Pacific	270,000	9,990,000	200,000	8,150,000
Southwest Bancshares	66,500	1,629,250	—	—
Sun Banks of Florida	185,000	4,093,125	185,000	3,422,500
Texas Commerce Bancshares	91,000	3,401,125	—	—
U.S. Bancorp	45,000	810,000	—	—
Valley National Bank of Arizona	180,000	3,150,000	—	—
Wachovia	38,800	1,236,750	—	—
Wells Fargo	345,654	9,289,451	762,584	19,445,893
Subtotals		**$253,942,699**		**$212,663,797**
Beverages				
Anheuser-Busch	98,912	$6,379,824	85,000	$3,495,625
Associated Coca-Cola Bottling	—	—	141,000	6,803,250
Brown-Forman Distillers	45,300	1,625,138	—	—
Coca-Cola	1,156,400	60,132,800	1,906,400	66,247,400
Dr. Pepper	90,000	1,136,250	—	—
General Cinema	25,000	728,125	—	—
Cum. conv. pfd. A	25,000	715,625	—	—
National Distillers & Chemical	30,000	735,000	—	—
PepsiCo	1,096,978	39,216,963	1,259,278	45,806,237
Conv. deb. 8% 04/01/96	$3,300,000*	3,399,000	—	—
Seagrams	44,000	3,245,000	—	—
Hiram Walker Resources	308,000	4,928,000	25,000	484,375
Subtotals		**$122,241,725**		**$122,836,887**
Broadcasting				
ABC	222,685	$12,832,223	448,600	$15,252,400
Capital Cities Communications	96,600	11,555,775	146,600	10,811,750
CBS	534,700	31,948,325	584,700	27,700,163
Cox Cable Communications	69,100	2,954,025	—	—
Metromedia	35,000	10,360,000	70,100	11,216,000
Multimedia	32,000	1,568,000	—	—
Oak Industries	122,000	1,753,750	—	—
Taft Broadcasting	50,000	1,981,250	200,000	6,550,000
Tele-Communications Class A	65,000	1,803,750	—	—
Subtotals		**$76,757,098**		**$71,530,313**
Business services				
H&R Block	100,00	$4,175,000	100,000	$3,800,000
Computer Sciences	—	—	10,000	131,250
A.T. Cross Class A	20,000	515,000	100,000	5,400,000
Deluxe Check Printers	137,700	5,542,425	200,000	5,625,000
John H. Harland	14,600	543,850	—	—
Kelly Services	145,000	4,495,000	100,000	4,400,000
Parker Pen	460,000	6,670,000	200,000	2,850,000
PHH Group	10,000	375,000	—	—
Purolator	117,800	5,860,550	270,000	9,720,000
Quotron Services	62,00	2,092,500	—	—
Rollins	85,000	1,275,000	—	—
Subtotals		**$31,544,325**		**$31,926,250**
Chemicals and textiles				
Air Products & Chemicals	80,000	$ 2,910,000	—	—
Allied	594,628	19,251,082	490,414	$21,516,914
Conv. deb. 7.75%, 6/16/05	$4,000,000*	3,070,000	$6,000,000*	4,927,500
American Cyanamid	300,000	10,425,000	157,300	4,561,700
Betz Laboratories	55,000	1,856,250	—	—
Big Three Industries	215,000	4,837,500	—	—
Cabot	80,000	1,670,000	—	—
Celanese	125,000	5,656,250	—	—
Chemed	385,000	12,801,250	—	—
Diamond Shamrock	490,000	10,228,750	400,000	10,150,000
Dow Chemical	1,888,000	48,852,000	405,000	13,010,625
E.I. DuPont de Nemours	1,465,087	52,559,996	1,150,000	30,187,500
Economics Laboratory	35,000	980,000	—	—
Engelhard	35,000	1,128,750	—	—
Ethyl	14,000	413,000	—	—
First Mississippi	165,000	1,402,500	—	—
W.R. Grace	602,000	23,101,750	200,000	9,150,000
Great Lakes Chemical	7,400	246,975	—	—
Hercules	1,100,000	30,387,500	1,100,000	24,887,500
International Minerals & Chemical	313,700	10,077,612	175,700	5,688,287
Lubrizol	151,700	2,844,375	—	—
Monsanto	791,800	60,374,750	841,800	59,031,225
Nalco Chemical	112,600	3,265,400	—	—
NCH	200,000	3,200,000	—	—
Oakite Products	17,800	391,600	—	—
Olin	94,000	2,209,000	—	—
PENNWALT	61,100	1,825,363	—	—
Petrolite	60,000	1,860,000	—	—
PPG Industries	475,000	24,581,250	425,000	16,043,750
Products Research & Chemical	61,400	882,625	—	—
Raychem	31,800	2,110,725	—	—
Rohm & Haas	10,000	780,000	—	—
Sealed Air	150,000	4,237,500	—	—
Stauffer Chemical	870,000	20,227,500	920,000	20,470,000
Sun Chemical	24,000	429,000	—	—
Union Carbide	1,070,005	56,576,514	992,944	51,012,498
Uniroyal	452,000	5,311,000	—	—
Williams	542,100	9,215,700	—	—
Witco Chemical	15,000	412,500	—	—
Subtotals		**$442,590,967**		**$311,791,615**
Communications equipment and service				
Communications Industries	25,000	$ 806,250	—	—
Communications Satellite	25,000	1,950,000	—	—
Graphic Scanning	55,000	1,017,500	—	—
Harris	300,000	11,100,000	100,000	$4,112,500
M/A-COM	320,900	7,420,812	200,000	5,050,000
MCI Communications	605,000	22,006,875	—	—
Mitel	25,000	753,125	—	—
Northern Telecom	205,314	14,371,980	—	—
Paradyne	55,000	2,062,500	—	—
Plantronics	300,000	5,925,000	300,000	4,875,000
Regency Electronics	75,000	1,256,250	—	—
ROLM	88,121	4,472,141	121,800	3,897,600
Scientific-Atlanta	190,000	3,040,000	—	—
Sykes Datatronics	121,000	1,331,000	—	—
Tie/Communications	20,000	760,000	—	—
Subtotals		**$78,273,433**		**$17,935,100**
Computer service				
Anacomp	80,000	$1,340,000	—	—
Automatic Data Processing	628,200	23,243,400	718,200	$18,044,775
Computer Sciences	203,100	3,884,288	10,000	131,250
Cullinane Database Systems	50,000	2,306,250	—	—
Electronic Data Systems	30,000	1,350,000	—	—
National Data	48,000	1,098,000	—	—
Panasophic Systems	158,200	2,728,950	158,200	1,779,750
Reynolds and Reynolds	16,000	492,000	—	—
Shared Medical Systems	20,000	1,092,500	—	—
Tera	55,000	1,347,500	—	—
Tymshare	197,200	3,549,600	157,200	4,499,850
Subtotals		**$42,432,488**		**$24,455,625**
Construction and mining equipment				
Blount	24,000	$ 468,000	—	—
BUCYRUS-ERIE	164,400	2,424,900	—	—
Caterpillar Tractor	1,702,900	68,328,863	1,702,900	$94,510,950
Conv. deb. 5.5%, 6/30/00	$6,350,000*	5,643,562	$6,350,000*	6,921,500
Joy Manufacturing	160,000	3,780,000	—	—
Subtotals		**$80,645,325**		**$101,432,450**
Construction materials and homebuilders				
Ameron	17,000	$ 435,625	—	—
Armstrong World Industries	784,500	19,416,375	1,284,500	$21,515,375
Carlisle	40,000	1,290,000	—	—
Centex	20,000	830,000	—	—
Champion Home Builders	162,000	850,500	—	—
Dillingham	20,000	457,500	—	—
Ideal Basics Industries	106,000	1,987,500	—	—
Johnson Controls	55,000	1,945,625	—	—
Lone Star Industries	89,400	2,726,700	—	—
Masco	270,000	7,661,250	100,000	3,700,000
Masonite	35,000	1,671,250	—	—
National Gypsum	100,000	2,725,000	100,000	2,150,000
Owens-Corning Fiberglass	224,700	8,426,250	—	—
Perini	6,300	160,650	—	—
Pulte Home	35,000	1,356,250	—	—
Rouse	22,500	599,063	—	—
Ryan Homes	40,000	1,755,000	—	—
Scovill	45,000	1,102,500	—	—
Trane	58,000	1,711,000	—	—
Tyler	20,000	380,000	—	—
U.S. Home	50,000	1,356,250	50,000	687,500
United States Gypsum	200,000	10,100,000	300,000	10,050,000
Jim Walter	127,194	4,674,379	320,000	6,200,000
Zapata	26,000	422,500	—	—
Subtotals		**$74,041,167**		**$44,302,875**
Containers				
American Can	141,600	$4,371,900	—	—
Anchor Hocking	208,300	4,113,925	—	—
Ball	29,882	855,372	74,504	$2,505,197
Continental Group	905,000	30,770,000	905,000	29,638,750
Crown Cork & Seal	100,000	2,950,000	100,000	3,000,000
National Can	169,300	3,893,900	100,000	2,125,000
Owens-Illinois	305,000	8,616,250	305,000	9,035,625
Subtotals		**$55,571,347**		**$46,304,572**
Cosmetics				
Avon Products	1,000,000	$26,750,000	1,000,000	$30,000,000
Chesebrough-Pond's	347,600	15,642,000	357,600	12,069,000
Gillette	277,000	12,465,000	277,000	9,348,750
International Flavors & Fragrances	170,000	4,696,250	170,000	3,315,000
Noxell Class A non-voting	4,000	205,000	—	—
Revlon	880,403	26,632,191	—	—
Conv. deb. 4.75%, 4/15/87	—	—	$10,105,000*	8,033,475
Revlon International Finance, conv. deb. 4.75%, 6/15/83	—	—	$10,995,000*	10,335,300
Richardson-Vicks	35,000	945,000	—	—
Tampax	45,000	2,261,250	—	—
Subtotals		**$89,596,691**		**$76,249,775**
Electrical equipment				
AMP	300,000	$20,437,500	300,000	$ 15,262,500
Anixter Brothers	64,700	1,488,100	—	—
Augat	369,950	10,451,087	514,950	13,002,488
Burndy	510,200	11,096,850	610,000	11,742,500
Emerson Electric	510,700	30,897,350	810,700	36,785,513
Foster Wheeler	200,400	2,605,200	—	—
Foxboro	45,000	1,597,500	—	—
General Electric	2,149,200	203,905,350	2,857,200	163,931,850
General Signal	100,000	4,487,500	50,000	1,931,250
Gould	948,600	35,572,500	1,133,600	25,647,700
Harvey Hubbell Class B	17,000	484,500	—	—
International Telephone & Telegraph	2,181,035	68,157,344	2,281,035	67,860,791
McGraw-Edison	653,000	25,630,250	586,000	21,168,000
Minnesota Mining & Manufacturing	1,220,000	91,500,000	1,220,000	66,490,000
Molex	5,000	325,000	—	—
Square D	310,300	10,627,775	310,300	8,959,912
Thomas & Betts	117,400	6,163,500	267,400	15,509,200
Westinghouse Electric	760,200	29,552,775	340,400	8,680,200
Subtotals		**$554,980,081**		**$456,971,904**
Electronics				
Advanced Micro Devices	46,500	$1,168,312	—	—
Analog Devices	14,500	400,562	—	—

* Par value

BEST AVAILABLE COPY

	December 31, 1982		December 31, 1981	
	Shares	Market value	Shares	Market value
Electronics (Continued)				
Applied Materials	35,000	796,250	—	—
Avantek	65,000	1,381,250	—	—
Avnet	58,000	3,480,000	8,000	369,000
AVX	48,500	1,042,750	[illegible]	672,937
CTS	10,000	302,500	—	—
Daniel Industries	66,000	709,500	—	—
Esterline	33,500	690,938	—	—
John Fluke Manufacturing	145,000	3,733,750	50,000	962,500
GCA	250,300	5,444,025	—	—
General Instrument	355,000	17,661,250	73,000	3,230,250
GenRad	150,000	4,725,000	200,000	2,775,000
Hewlett-Packard	1,211,200	88,417,600	1,451,200	57,503,800
Intel	918,750	35,601,563	918,750	20,671,875
Motorola	445,000	38,715,000	150,000	8,662,500
National Semiconductor	515,850	11,348,700	515,850	9,865,631
Perkin-Elmer	442,700	12,561,612	100,000	2,700,000
Spectra-Physics	200,000	4,400,000	22,300	473,875
Tektronix	354,100	20,449,275	450,000	24,750,000
Teradyne	177,400	5,055,900	88,700	3,104,500
Texas Instruments	224,000	30,156,000	224,000	18,032,000
Tracor	38,750	1,123,750	—	—
Varian Associates	10,000	647,500	—	—
Veeco Instruments	31,700	630,038	—	—
Subtotals		**$290,643,025**		**$153,773,868**
Financial Companies				
Alleghany	15,000	$ 744,375	—	—
American Express	674,877	43,360,848	375,000	$16,546,875
Warrants	3,750	78,281	—	—
Avco	20,200	573,175	—	—
Baldwin-United	65,800	2,039,800	—	—
Beneficial	680,300	16,667,350	200,000	4,025,000
Foothill Group	300,000	2,250,000	—	—
Gelco	55,000	1,148,125	—	—
Household International	340,400	7,829,200	—	—
Subtotals		**$74,691,154**		**$20,571,875**
Food and related products				
Amfac	84,000	$2,184,000	—	—
Amstar	19,000	477,375	—	—
Anderson, Clayton	49,800	1,332,150	—	—
Archer Daniels Midland	594,090	12,772,935	100,000	$ 1,925,000
Beatrice Foods	966,700	22,717,450	1,116,700	20,100,600
Beatrice Foods Overseas Finance, N.V.				
Conv. deb 6.25%, 8/01/91	$400,000*	404,000	$400,000*	341,000
Conv. deb 7.25%, 11/01/90	$1,150,000*	1,489,250	$1,150,000*	1,127,000
Carnation	30,000	1,327,500	—	—
Consolidated Foods	393,000	17,734,125	617,300	19,444,950
CPC International	20,000	832,500	—	—
Dart & Kraft	767,100	52,546,350	914,800	46,426,100
Dekalb Agresearch	137,000	2,294,750	—	—
Esmark	118,750	6,857,813	—	—
General Foods	980,000	38,832,500	911,100	28,927,425
General Mills	100,000	4,875,000	100,000	3,587,500
Gerber Products	75,000	1,846,875	—	—
H.J. Heinz	200,000	8,075,000	—	—
Hershey Foods	50,000	2,818,750	50,000	1,800,000
International Multifoods	40,000	1,220,000	—	—
Kellogg	353,300	9,406,612	331,200	7,452,000
Lance	42,500	1,094,375	—	—
McCormick	10,000	266,250	—	—
Nabisco Brands	313,211	11,510,504	25,000	778,125
Newhall Land & Farming	15,000	540,000	—	—
Norton Simon	245,800	5,899,200	—	—
Pillsbury	55,000	2,750,000	55,000	2,179,375
Pioneer-Hi-Bred International	95,000	2,232,500	—	—
Quaker Oats	167,600	7,185,850	212,600	7,600,450
Ralston Purina	1,047,000	18,322,500	1,132,000	13,584,000
Conv. deb. 5.75% 04/01/00	$1,300,000*	1,534,000	—	—
A.E. Staley Manufacturing	148,000	2,812,000	—	—
Wilson Foods	34,000	327,250	—	—
Subtotals		**$244,519,364**		**$155,273,525**
Forest products				
Boise Cascade	523,900	$20,432,100	262,700	$ 8,997,475
Champion International	873,700	20,750,375	473,700	9,355,575
$4.60 cum. conv. pfd. C	38,500	1,944,250	38,500	1,554,438
Evans Products	63,146	528,848	38,246	669,305
Georgia-Pacific	866,000	22,732,500	180,000	3,622,500
Pacific Lumber	109,000	2,466,125	—	—
Potlatch	74,000	2,719,500	—	—
Trus Joist	139,500	3,975,750	31,000	620,000
Weyerhaeuser	875,300	31,510,800	210,700	6,110,300
Willamette Industries	110,000	4,152,500	—	—
Subtotals		**$111,212,748**		**$30,929,593**
Health Care				
Abbott Laboratories	566,300	$ 21,944,125	287,500	$ 7,762,500
American Home Products	1,657,000	74,150,750	2,357,000	86,030,500
American Hospital Supply	327,900	13,197,975	100,000	3,837,500
American Medical International	245,900	9,006,087	—	—
American Sterilizer	34,000	501,500	—	—
C.R. Bard	79,800	2,413,950	—	—
Bausch & Lomb	35,000	1,601,250	—	—
Baxter Travenol Laboratories	554,000	26,799,750	379,000	12,696,500
Becton Dickinson	157,100	6,676,750	—	—
Bergen Brunswig	65,000	2,136,875	—	—
Bristol-Meyers	485,000	32,616,250	485,000	25,765,625
Centocor	4,825	86,850	—	—
Community Psychiatric Centers	15,900	574,387	—	—
Comprehensive Care	60,000	1,125,000	—	—
Cooper Laboratories	7,700	508,200	—	—
Flow General	60,000	712,500	—	—
Foremost-McKesson	113,000	4,548,250	213,000	7,827,750
Glasrock Medical Services	40,000	950,000	—	—
Health care (Continued)				
Hazleton Laboratories	72,500	1,341,250	—	—
Hillenbrand Industrial	39,000	1,491,750	—	—
Hospital Corporation of America	405,900	22,527,450	225,900	7,737,075
Humana	244,100	10,984,500	—	—
IMS International	15,000	320,625	—	—
Intermedics	90,000	1,293,750	—	—
Johnson & Johnson	1,597,500	79,275,938	1,597,500	59,307,188
Key Pharmaceuticals	70,200	2,193,750	—	—
Eli Lilly	657,000	37,777,500	632,000	35,392,000
Medtronic	20,000	1,072,500	—	—
Merck & Co.	625,000	52,890,625	575,000	48,731,250
Millipore	50,000	1,412,500	—	—
National Medical Care	70,000	700,000	—	—
National Medical Enterprises	283,500	8,221,500	—	—
Pall	160,000	5,760,000	—	—
Pfizer	572,800	39,451,600	428,900	22,838,925
Rorer Group	30,000	735,000	—	—
Schering-Plough	940,000	37,012,500	1,200,000	33,600,000
G.D. Searle	50,000	2,068,750	—	—
SmithKline Beckman	927,900	64,025,100	326,500	22,079,562
Squibb	407,800	18,045,150	395,800	12,962,450
Sterling Drug	299,400	6,736,500	100,000	2,225,000
Sybron	7,900	129,362	—	—
Syntex	85,000	4,080,000	—	—
United States Surgical	70,000	1,400,000	—	—
Upjohn	375,700	17,423,088	315,700	16,968,875
Warner-Lambert	1,100,000	31,075,000	1,400,000	31,150,000
Subtotals		**$648,996,137**		**$436,912,700**
Household durable goods				
Black & Decker Manufacturing	311,300	$ 5,636,875	—	—
Hoover	140,000	1,575,000	—	—
Maytag	155,200	5,839,400	155,200	$ 3,957,600
Pittway	35,000	1,780,625	—	—
RCA	1,997,100	44,934,750	2,762,600	50,417,450
Singer	255,000	4,845,000	455,000	6,313,125
Stanley Works	75,000	1,837,500	—	—
Thomas Industries	16,695	308,858	—	—
Wells-Gardner Electronics	5,000	40,625	—	—
Whirlpool	607,800	26,591,250	1,550,000	39,331,250
White Consolidated Industries	237,000	8,532,000	400,000	10,900,000
Subtotals		**$101,921,883**		**$110,919,425**
Household products				
Clorox	50,000	$1,237,500	—	—
Colgate-Palmolive	1,067,000	20,939,875	1,317,000	$ 22,059,750
Lenox	25,000	1,168,750	—	—
Old Republic International	12,500	296,875	—	—
Procter & Gamble	577,200	68,253,900	877,200	70,504,950
Purex Industries	—	—	350,000	8,443,750
Shaklee	20,000	795,000	—	—
Unilever N.V.	355,000	26,003,750	450,000	26,775,000
Subtotals		**$118,695,650**		**$127,783,450**
Insurance				
Aetna Life & Casualty	1,329,050	$48,344,194	1,799,950	$ 79,197,800
Alexander & Alexander Services	335,000	8,500,625	200,000	5,100,000
American General	49,100	2,718,912	—	—
$3.25 cum. conv. pfd. B	25,700	1,400,650	—	—
American International Group	404,999	31,994,921	389,999	25,252,435
American National Insurance	15,000	228,750	—	—
Capital Holdings	96,800	3,412,200	—	—
Chubb	100,000	4,962,500	100,000	4,600,000
Cigna	960,554	42,504,515	—	—
Colonial Penn Group	115,300	1,902,450	—	—
Continental	1,620,000	47,992,500	2,340,000	61,717,500
Corroon & Black	200,000	5,300,000	250,000	5,312,500
Farmers Group	90,000	3,172,500	—	—
Gulf United	5,000	138,125	—	—
Frank B. Hall	25,000	718,750	200,000	5,975,000
INA	—	—	826,523	36,470,327
Fred S. James	—	—	169,200	3,933,900
Jefferson-Pilot	70,000	2,065,000	—	—
Kemper	20,000	755,000	—	—
Lincoln National	120,000	5,370,000	—	—
Marsh & McLennan	103,480	4,268,550	103,480	3,414,480
Mission Insurance Group	435,000	12,180,000	150,000	5,381,250
Ohio Casualty	47,000	2,015,125	—	—
Provident Life & Accident	20,000	1,010,000	—	—
Rollins Burdick Hunter	—	—	108,500	2,332,750
St. Paul	374,000	22,860,750	632,000	30,889,000
Southland Financial	430,000	7,740,000	550,000	11,137,500
Stewart Information Services	25,000	962,500	—	—
Transamerica	905,000	21,154,375	425,000	9,934,375
Travelers	2,323,760	56,060,710	2,068,680	90,763,335
U.S. Fidelity & Guaranty	573,500	26,022,562	311,500	12,888,313
USLIFE	79,100	1,819,300	—	—
Subtotals		**$367,575,464**		**$410,847,700**
Leisure-time				
AMF	157,000	$2,570,875	—	—
Bally Manufacturing	75,000	1,753,125	—	—
Warrants	2,500	20,937	—	—
Briggs & Stratton	400,000	14,400,000	300,000	$ 7,125,000
Coachman Industries	60,000	1,455,000	—	—
Walt Disney Productions	520,000	32,890,000	900,000	47,025,000
Jostens	33,700	842,500	—	—
MCA	200,000	14,175,000	200,000	8,275,000
Mattel	60,000	997,500	—	—
$2.50 cum. conv. pfd.	34,600	1,310,475	—	—
Outboard Marine	70,000	2,021,250	—	—
Warner Communications	566,266	18,969,911	841,266	46,164,472
Warrants	19,324	246,381	19,325	381,669
Leisure-time (Continued)				
Winnebago Industries	45,000	596,250	—	—
Subtotals		**$92,249,204**		**$108,971,141**
Machinery–farm, industrial, and related industry				
ACF Industries	345,204	$11,305,431	—	—
Acme-Cleveland	35,000	634,375	—	—
AMSTED Industries	465,800	10,946,300	406,000	$ 14,260,750
Baldor Electric	20,000	440,000	—	—
Browning-Ferris Industries	137,000	7,312,375	100,000	3,212,500
Chromalloy American	172,800	1,598,400	—	—
Cincinnati Milacron	143,900	3,651,462	—	—
Clark Equipment	558,000	14,717,250	489,000	13,203,000
Cooper Industries	345,300	9,884,213	—	—
Cross & Trecker	72,000	1,458,000	—	—
Deere	900,091	26,552,685	900,091	31,953,231
Diebold	20,000	1,490,000	—	—
Dover	100,000	3,062,500	—	—
Emhart	7,700	350,350	—	—
Ex-Cell-O	118,300	3,075,800	—	—
Figgie International	7,000	154,000	—	—
FMC	647,200	20,872,200	547,200	14,022,000
$2.25 cum. conv. pfd.	38,900	1,531,687	38,900	1,235,075
GATX	65,000	1,673,750	—	—
Goulds Pumps	41,500	736,625	—	—
Hyster	214,000	8,185,500	134,000	4,740,250
Ingersoll-Rand	301,000	11,889,500	68,000	3,842,000
Keystone International	40,000	830,000	—	—
Manitowoc	10,000	180,000	—	—
Midland-Ross	120,000	1,965,000	—	—
Norton	10,351	337,701	—	—
Omark Industries	330,000	6,806,250	300,000	5,625,000
Parker-Hannifin	105,000	2,244,375	—	—
Peabody International	74,000	619,750	—	—
Ransburg	55,000	1,031,250	—	—
Raymond International	34,000	442,000	—	—
Research-Cottrell	42,100	620,975	—	—
Rexnord	39,700	456,550	—	—
SCA Services	45,000	798,750	—	—
Signode	—	—	212,700	[illegible]
SPS Technologies	29,000	406,000	—	—
Stewart-Warner	44,000	1,100,000	—	—
Timken	86,900	4,410,175	—	—
Trinity Industries	113,500	1,418,750	—	—
Unimation	—	—	19,600	392,000
U.S. Industries	55,000	591,250	—	—
Waste Management	224,700	12,021,450	—	—
Wheelabrator-Frye	135,100	6,552,350	—	—
Subtotals		**$184,354,979**		**$100,156,406**
Motor vehicles, equipment, and tires				
Armstrong Rubber	19,000	$579,500	—	—
Bandag	164,000	6,929,000	273,000	$ 6,859,125
Bendix	—	—	73	4,289
$4.04 cum. conv. pfd. B	—	—	30,400	1,470,600
Borg-Warner	79,000	2,992,125	—	—
Chrysler	164,600	2,921,650	—	—
Cummins Engine	371,500	18,110,625	321,500	11,413,250
Dana	295,000	10,251,250	200,000	5,900,000
Eaton	777,200	24,870,400	777,200	24,773,250
Echlin Manufacturing	100,000	1,950,000	—	—
Federal-Mogul	47,100	1,413,000	—	—
Firestone Tire & Rubber	859,800	15,906,300	859,800	10,854,975
Ford Motor	1,967,250	76,476,844	1,972,250	33,035,187
General Motors	3,575,400	223,015,575	4,101,000	157,888,500
General Tire & Rubber	102,000	2,996,250	100,000	2,150,000
B.F. Goodrich	25,000	803,125	—	—
Goodyear Tire & Rubber	731,202	25,592,070	1,425,000	27,075,000
PACCAR	26,000	2,138,500	—	—
Safety-Kleen	45,000	1,237,500	—	—
Sigmaform	25,000	350,000	—	—
Snap-On Tools	5,000	135,000	—	—
Stanadyne	100,000	3,400,000	100,000	3,875,000
Subaru of America	15,000	990,000	—	—
Sun Electric	300,000	3,862,500	109,900	1,346,275
Subtotals		**$426,921,214**		**$286,645,451**
Multi-industry				
Alco Standard	55,000	$1,650,000	—	—
American Standard	222,700	6,681,000	—	—
Bangor Punta	24,000	444,000	—	—
Bob Evans Farms	36,000	1,296,000	—	—
Colt Industries	220,000	6,820,000	180,000	$ 10,080,000
Crane	16,700	402,888	—	—
Dravo	46,576	576,378	—	—
Greyhound	136,000	2,346,000	—	—
Gulf & Western Industries	300,800	5,038,400	—	—
Kidde	98,100	2,305,350	—	—
Lear Seigler	580,000	20,227,500	100,000	2,900,000
Litton Industries	674,164	33,792,471	241,842	13,633,843
LTV	268,000	3,048,500	—	—
Martin Marietta	100,000	4,375,000	—	—
Monogram Industries	6,300	275,625	—	—
Moore McCormack Resources	124,500	2,801,250	—	—
Morrison-Knudson	15,000	363,750	—	—
Northwest Industries	128,100	4,595,587	—	—
Ogden	262,100	7,338,800	162,100	4,234,863
Overseas Shipholding Group	665,900	10,321,450	250,000	4,062,500
Penn Central	208,450	5,497,869	602,300	24,844,875
Rockwell International	870,100	36,979,250	870,100	28,495,775
Signal	1,039,300	25,982,500	150,000	3,806,250
Sunstrand	5,000	220,000	—	—
Teledyne	139,000	17,983,125	100,000	13,850,000
Textron	265,000	6,293,750	—	—
Todd Shipyards	35,000	1,085,000	—	—
TRW	202,000	13,660,250	—	—
Tyco Laboratories	425,700	7,449,750	213,300	2,639,587
United Technologies	105,700	5,985,262	299,800	12,516,650
$3.875 cum. Conv. pfd. C	194,800	13,782,100	39,500	2,054,000
Whittaker	25,000	631,250	—	—
Subtotals		**$250,250,055**		**$123,118,343**

* Par value

Continued on Following Page

FACT–FILE

	December 31, 1982		December 31, 1981	
	Shares	**Market value**	**Shares**	**Market value**
Office equipment				
Amdahl	415,000	$12,346,250	37,000	$ 1,091,500
Apple Computer	305,000	9,111,875	150,000	3,318,750
Applied Magnetics	51,500	1,049,312	—	—
Burroughs	751,200	31,362,600	751,200	25,540,800
CADO Systems	240,000	2,520,000	180,000	2,655,000
Commodore International	40,500	2,683,125	—	—
Computer & Communications Technology	270,000	3,982,500	—	—
Computervision	277,000	8,552,375	—	—
Control Data	565,000	20,975,625	—	—
CPT	455,000	8,133,125	131,000	2,358,000
Cray Research	164,000	6,334,500	69,000	2,518 500
Data General	283,100	11,253,225	349,800	18,801,750
Datapoint	155,000	2,848,125	150,000	7,587,500
Dataproducts	51,000	1,836,000	—	—
Digital Equipment	679,800	67,640,100	654,800	56,640,200
Docutel	50,000	1,012,500	—	—
Evans & Sutherland Computer	37,000	1,563,250	—	—
Floating Point Systems	54,000	1,410,750	—	—
Honeywell	301,700	25,757,638	100,000	6,987,500
International Business Machines	5,695,700	548,211,125	5,695,700	323,942,938
ISC Systems	205,000	3,792,500	—	—
Lanier Business Products	455,000	8,360,625	—	—
Management Assistance	57,000	598,500	—	—
Mohawk Data Sciences	34,000	510,000	—	—
NBI	170,000	6,290,000	—	—
NCR	416,100	35,784,600	531,100	23,169,237
ONYX + IMI	300,000	3,300,000	50,000	600,000
Pitney Bowes	211,100	9,657,825	—	—
$2.12 cum. conv. pfd.	95,000	4,346,250	—	—
Prime Computer	90,000	3,116,250	270,000	6,378,750
Quantum	32,500	682,500	—	—
Sperry	683,669	22,988,370	410,309	14,463,392
Storage Technology	824,300	17,516,375	150,000	5,250,000
Tandem Computers	160,000	4,060,000	200,000	5,550,000
Tandon	20,000	630,000	—	—
Telex	30,000	660,000	—	—
Triad Systems	233,000	4,834,750	30,000	975,000
Verbatim	40,000	1,135,000	—	—
Wang Laboratories	1,133,400	33,435,300	473,000	15,727,250
Xerox	755,000	28,218,125	930,000	37,665,000
Subtotals		**$858,500,970**		**$561,321,067**
Paper products				
Albany International	190,000	$ 5,605,000	—	—
Consolidated Papers	15,000	480,000	—	—
Crown Zellerbach	720,000	21,150,000	820,000	$ 23,780,000
Federal Paper Board	18,000	510,750	—	—
Great Northern Nekoosa	173,000	6,206,375	108,000	3,969,000
Hammermill Paper	46,000	1,437,500	—	—
International Paper	1,850,214	89,504,102	2,119,914	82,941,635
James River	104,700	3,965,513	92,700	1,830,825
Longview Fibre	110,000	2,145,000	—	—
Mead	503,500	9,440,625	200,000	4,600,000
St. Regis Paper	1,325,300	32,635,512	1,357,900	42,773,850
Sonoco Products	35,000	1,146,250	—	—
Union Camp	844,000	50,851,000	1,009,000	50,071,625
Westvaco	614,250	15,893,719	614,250	14,511,656
Subtotals		**$240,971,346**		**$224,478,391**
Petroleum–domestic				
Adobe Oil & Gas	71,000	$ 1,073,875	—	—
Amerada Hess	142,000	3,550,000	—	—
Apache	108,500	1,139,250	—	—
Ashland Oil	390,000	11,310,000	100,000	$ 3,125,000
Atlantic Richfield	1,734,600	72,853,200	1,599,600	74,981,250
Belco Petroleum	74,000	1,748,250	—	—
Charter	124,000	1,364,000	—	—
Cities Service				
Zero coup. 12/03/85	$1,049,400*	717,527	550,000	25,300,000
Zero coup. 12/03/86	$1,258,000*	743,792	—	—
Zero coup. 12/03/87	$1,397,100*	733,477	—	—
Zero coup. 12/03/88	$1,887,100*	851,554	—	—
Zero coup. 12/03/89	$2,411,800*	946,631	—	—
Coastal	75,000	1,471,875	—	—
Dorchester Gas	10,800	120,150	—	—
Energy Reserves Group	415,000	1,452,500	—	—
Enterra	17,100	380,475	—	—
Equity Oil	40,600	299,425	—	—
General American Oil	198,954	8,629,630	—	—
Getty Oil	662,300	32,121,550	543,300	35,110,763
Hadson Petroleum	223,000	1,059,250	—	—
Hamilton Brothers Petroleum	112,500	1,054,688	—	—
Kerr-McGee	129,000	3,708,750	—	—
Kirby Exploration	18,100	142,538	—	—
Louisiana Land & Exploration	221,400	4,677,075	—	—
McRae Consolidated Oil & Gas	15,000	151,875	—	—
Mesa Offshore Trust	518,300	1,036,600	—	—
Mesa Petroleum	518,300	6,090,025	—	—
Mitchell Energy & Development	150,000	2,306,250	—	—
Mountain Fuel Supply	100,200	3,519,525	100,200	3,206,400
Murphy Oil	100,000	2,325,000	—	—
Natomas	166,000	2,697,500	—	—
Noble Affiliates	131,000	1,866,750	—	—
Occidental Petroleum	162,300	3,205,425	—	—
$15.50 cum. Conv. pfd. I	129,602	11,761,382	—	—
Oceaneering International	150,000	1,781,250	—	—
Pennzoil	128,000	4,496,000	—	—
Phillips Petroleum	1,579,000	51,514,875	1,565,000	63,382,500
Pioneer	146,500	3,003,250	—	—
Pogo Producing	5,000	106,250	—	—
Quaker State Oil Refining	24,000	378,000	—	—
Sabine	43,000	1,574,875	—	—
Shell Oil	2,184,500	80,826,500	2,103,000	92,532,000
Sigmor	10,000	171,250	—	—
Southland Royalty	165,800	2,507,725	—	—
Standard Oil of Indiana	2,582,600	102,658,350	2,305,000	119,860,000

	December 31, 1982		December 31, 1981	
	Shares	**Market value**	**Shares**	**Market value**
Petroleum–domestic (Continued)				
Standard Oil of Ohio	1,743,000	62,094,375	1,020,000	42,330,000
Sun	999,000	31,343,625	850,000	38,675,000
Superior Oil	1,007,000	28,951,250	895,000	33,003,125
Tesoro Petroleum	75,015	1,265,878	—	—
Texas International	130,000	1,040,000	—	—
Tosco	65,000	723,125	—	—
Union Oil of California	1,270,000	33,813,750	905,000	34,050,625
Universal Resources	157,800	927,075	—	—
Woods Petroleum	55,000	1,203,125	—	—
Subtotals		**$597,490,322**		**$565,556,663**
Petroleum–international				
British Petroleum ADR	179,600	$ 3,389,950	179,600	$ 4,265,500
ENSTAR	355,100	5,415,275	—	—
Exxon	7,995,000	237,851,250	8,770,000	274,062,500
Gulf Oil	2,460,400	73,196,900	2,883,400	102,000,275
Mobil	3,216,000	80,802,000	3,100,000	74,787,500
Royal Dutch Petroleum 10 Fl. Ord. Shs.	3,297,400	114,172,475	3,322,400	115,868,700
Standard Oil of California	2,623,300	83,945,600	2,243,800	96,202,925
Texaco	2,564,000	79,804,500	2,650,000	87,450,000
Subtotals		**$678,577,950**		**$754,637,400**
Petroleum services				
Baker International	569,900	$ 12,822,750	362,900	$ 13,790,200
Tom Brown	130,000	1,121,250	—	—
Cameron Iron Works	93,000	1,953,000	—	—
Combustion Engineering	31,500	1,035,563	—	—
Crutcher Resources	165,900	1,140,562	—	—
Dresser Industries	679,000	13,410,250	477,000	15,860,250
Fluor	423,200	8,252,400	200,000	6,000,000
Galveston-Houston	52,500	905,625	—	—
Gearhart Industries	220,000	3,355,000	—	—
Global Marine	225,000	2,081,250	—	—
Halliburton	944,000	33,394,000	800,000	41,700,000
Helmerich & Payne	95,000	1,852,500	—	—
Hughes Tool	473,000	10,465,125	295,000	11,836,875
Kaneb Services	98,600	1,479,000	—	—
McDermott	44,139	904,849	400,000	15,200,000
McDermott International	379,861	7,692,185	—	—
Newpark Resources	271,000	1,727,625	—	—
NL Industries	487,100	8,950,462	300,000	11,925,000
Ocean Drillin & Exploration	68,000	1,428,000	—	—
Parker Drilling	167,000	1,690,875	—	—
Parsons	135,000	2,851,875	—	—
Petrolane	181,500	2,518,313	—	—
Petroleum Equipment Tools	48,000	408,000	—	—
Petroleum Helicopters	38,000	308,750	—	—
Production Operators	30,000	187,500	—	—
Reading & Bates	172,900	2,334,150	—	—
Regal International	32,500	52,813	—	—
Rowan Companies	130,000	1,348,750	—	—
Sage Energy	89,100	690,525	—	—
Schlumberger	3,250,012	151,531,809	3,250,012	181,594,420
SEDCO	297,000	8,687,250	825,000	30,525,000
Smith International	70,000	1,977,500	—	—
Tidewater	83,700	2,155,275	—	—
Unit Drilling and Exploration	50,000	325,000	—	—
Varco International	70,000	411,250	—	—
Weatherford International	54,700	553,838	—	—
Western of North America	367,400	3,260,675	—	—
Subtotals		**$295,265,544**		**$328,431,745**
Photography				
Bell & Howell	25,000	$750,000	—	—
Eastman Kodak	1,388,000	119,368,000	1,500,000	$106,687,500
Fotomat	63,500	341,312	—	—
Polaroid	162,000	4,090,500	—	—
Subtotals		**$124,549,812**		**$106,687,500**
Publishing				
American Greetings Class A	10,000	$ 377,500	—	—
Bowne	37,600	592,200	—	—
Commerce Clearing House	30,000	1,860,000	—	—
Dow Jones	187,200	12,308,400	287,200	$ 14,216,400
Dun & Bradstreet	222,300	21,896,550	352,300	22,194,900
Gannett	540,000	34,222,500	675,000	24,384,375
Harte-Hanks Communications	29,500	1,180,000	—	—
Knight-Ridder Newspapers	220,000	10,890,000	100,000	3,025,000
McGraw-Hill	260,000	19,565,000	585,000	30,273,750
Simplicity Pattern	176,100	1,342,762	—	—
Time	720,917	37,577,799	591,212	22,613,859
$4.50 cum. conv. Pfd. C	—	—	168,000	11,010,550
Times Mirror	431,300	26,902,338	680,000	31,110,000
Washington Post	40,000	2,210,000	—	—
Subtotals		**$170,925,049**		**$147,818,284**
Railroads				
Burlington Northern	185,400	$ 9,849,375	—	—
Chicago & North Western Transportation	33,000	717,750	—	—
CSX	662,544	33,872,562	566,620	$ 32,863,960
Florida East Coast Railway	47,900	904,112	—	—
Katy Industries	43,000	521,375	—	—
Missouri Pacific	—	—	451,300	37,006,600
Norfolk Southern	755,904	41,385,744	358,700	18,607,562
Santa Fe Industries	933,000	20,992,500	102,000	2,154,750
Southern Pacific	390,900	14,170,125	390,900	15,929,175
Southern Railway	—	—	177,983	16,952,881
Union Pacific	921,430	43,307,210	210,000	10,920,000
$7.25 cum. Conv.pfd. A	124,107	12,969,182	—	—
Subtotals		**$178,689,935**		**$134,434,928**

	December 31, 1982		December 31, 1981	
	Shares	**Market value**	**Shares**	**Market value**
Restaurants and hotels				
Chart House	45,000	$ 1,113,750	—	—
Church's Fried Chicken	232,900	8,267,950	164,900	$4,761,488
Collins Food International	17,200	346,150	—	—
Dennys	90,000	2,868,750	—	—
Hilton Hotels	211,000	9,442,250	35,000	1,330,000
Holiday Inns	210,400	7,705,900	—	—
Host International	—	—	48,000	1,368,000
Jerrico	25,000	640,625	—	—
Luby's Cafeteria	4,000	145,500	—	—
Marriott	127,700	7,470,450	—	—
McDonald's	585,000	35,319,375	835,000	54,588,125
Prime Motor Inns	55,000	1,258,125	—	—
Wendy's International	45,000	658,125	—	—
Subtotals		**$75,236,950**		**$62,047,613**
Retail food				
Albertson's	40,000	$ 1,890,000	588,600	$15,597,900
American Stores	76,520	4,973,800	181,000	5,339,500
Circle K	400,000	5,750,000	100,000	1,175,000
Dillon	288,678	9,598,544	503,848	11,273,599
Great Atlantic & Pacific Tea	—	—	816,000	3,162,000
Jewel	182,000	9,100,000	200,000	7,575,000
Kroger	246,900	9,721,688	1,056,700	27,474,200
Lucky Stores	780,147	13,652,572	780,147	10,239,429
Safeway Stores	106,500	4,872,375	456,500	12,097,250
Southland	169,664	6,574,480	394,664	12,530,582
Conv. deb. 5% 7/15/87	$1,805,000*	2,026,112	$1,805,000*	1,624,500
Super Valu Stores	118,500	3,066,188	—	—
Subtotals		**$71,225,759**		**$108,088,960**
Retail trade				
Allied Stores	500,000	$19,062,500	500,000	$ 13,062,500
Ames Department Stores	10,000	335,000	—	—
Associated Dry Goods	75,000	3,337,500	—	—
Best Products	57,500	1,437,500	227,500	4,151,875
Carter Hawley Hale Stores	187,929	2,936,391	—	—
Color Tile	55,000	1,354,375	—	—
Dayton Hudson	600,000	33,075,000	700,000	21,000,000
Jack Eckerd	224,600	5,530,775	99,600	2,427,750
Edison Brothers Stores	40,000	1,095,000	—	—
Federated Department Stores	340,900	16,107,525	122,600	4,413,600
General Nutrition	20,000	545,000	—	—
Gordon Jewelry Class A	391,650	7,196,569	311,650	5,298,050
K mart	871,900	19,181,800	696,900	10,976,175
Levitz Furniture	6,000	264,000	—	—
The Limited	30,000	720,000	—	—
Longs Drug Stores	187,400	6,676,125	200,000	5,775,000
Lowe's	73,000	2,527,625	—	—
R. H. Macy	310,746	18,955,506	252,023	13,357,219
May Department Stores	227,000	10,697,375	200,000	5,000,000
Melville	50,000	3,537,500	—	—
Mercantile Stores	17,000	1,967,750	—	—
Miller-Wohl	45,000	1,226,250	—	—
Modern Merchandising	—	—	252,600	2,368,125
Nordstrom	20,000	970,000	—	—
Payless Cashways	35,500	1,557,563	—	—
J. C. Penney	563,100	27,239,962	100,000	2,862,500
Petrie Stores	55,000	1,416,250	—	—
Sears, Roebuck	1,852,000	55,791,500	1,132,000	18,253,500
Service Merchandise	101,000	2,828,000	151,000	1,774,250
Tandy	839,000	42,579,250	386,500	13,044,375
Toys "R" Us	90,000	3,667,500	—	—
United States Shoe	30,000	1,646,250	—	—
Wal-Mart Stores	154,900	7,725,637	—	—
Conv. deb. 9.50% 12/1/06	$1,950,000*	3,763,500	—	—
F.W. Woolworth	150,000	3,881,250		
Zale	5,000	103,125	—	—
Subtotals		**$310,936,853**		**$123,764,919**
Savings & loan				
H. F. Ahmanson	465,000	$12,903,750	425,000	$ 6,428,125
Federal National Mortgage Association	350,400	8,584,800	350,400	2,978,400
Financial Corporation of America	300,000	7,762,500	150,000	3,450,000
First Charter Financial	231,700	4,141,638	—	—
First Columbia Financial	20,000	247,500	—	—
FN Financial of California	275,000	4,743,750	—	—
Gibraltar Financial of California	142,700	1,409,162	—	—
Golden West Financial	229,200	3,581,250	—	—
Great Western Financial	345,000	9,444,375	575,000	8,337,500
Imperial of America	100,000	1,300,000	—	—
Subtotals		**$ 54,118,725**		**$ 21,194,025**
Steel				
Allegheny International	21,000	$ 585,375	—	—
Armco	511,700	8,379,088	—	—
Bethlehem Steel	737,000	14,187,250	570,000	$ 13,252,500
Carpenter Technology	60,000	2,407,500	—	—
CBI Industries	43,300	1,672,462	—	—
Cleveland-Cliffs Iron	95,000	1,733,750	—	—
Copperweld	11,700	190,125	—	—
Florida Steel	250,000	4,218,750	—	—
Hanna Mining	40,000	730,000	—	—
Inland Steel	606,000	15,756,000	306,000	7,152,750
Interlake	5,102	169,641	—	—
Kaiser Steel	71,000	1,464,375	—	—
Kennametal	47,300	1,359,875	—	—
Koppers	177,700	2,843,200	—	—
National Steel	501,700	8,779,750	300,000	6,937,500
Nucor	191,000	11,937,500	—	—
Park-Ohio Industries	30,000	427,500	—	—
Quanex	55,000	378,125	—	—
Republic Steel	390,000	6,093,750	150,000	3,675,000
United States Steel	1,142,000	23,982,000	1,000,000	29,875,000
Worthington Industries	285,000	6,697,500	200,000	4,400,000
Subtotals		**$113,983,516**		**$ 65,292,750**

Continued on Following Page

Pensions

Continued from Page 21

C.R.E.F. focused initially on Mr. Schotland's criticisms of their governance, which they portrayed as enabling participants to express their views and help select trustees.

On the subject of using their own people to manage C.R.E.F. investments, the companies argued that there was "little evidence to suggest that one method is better than the other in terms of performance." They defended C.R.E.F.'s performance principally in terms of its strategy—"to avoid the extremes of conservatism or of high risk."

In discussing whether participants should be able to receive lump-sum payments, or "cash-outs," at retirement, the companies said Mr. Schotland had implied that rollovers were "materially different" from cash-outs, but that they were not.

Moreover, they said, giving participants "freedom to write one's own ticket may be in step with the times, but whether it will prove to be good pension practice for the long pull remains to be seen."

Mr. Schotland insisted last week that T.I.A.A. and C.R.E.F. had "ignored the facts" about lump-sum payments and rollovers, and that they were separate issues. He said he favored letting participants switch to other investment vehicles for continued retirement income, but not to have immediate access to all of the cash for other purposes.

The six-page article from T.I.A.A. and C.R.E.F. was not signed. A spokesman, calling it a "concerted" staff effort, declined to comment on substantive questions.

'Significant Questions'

David Z. Robinson, executive vice-president of the Carnegie Corporation of New York, said Mr. Schotland's article had raised "significant questions about pension options that should be there." He added that the foundation, which helped establish the Teachers Insurance Annuity Association in 1918 and has helped finance it over the years, would decide by the end of the summer whether to back a new study.

Mr. Robinson said the foundation's interest in such a study included questions about the purposes and adequacy of college retirement plans in the light of legislative and economic changes in recent years. He said there was a need for new advice and "ground rules," both for individuals and their institutions.

The article from T.I.A.A. and C.R.E.F. said the companies had been in touch with some of the other foundations and organizations that have been considering the idea of a national study of retirement programs.

Among the "basic questions" to be addressed, the companies indicated, are whether retirees should be able to receive lump-sum payments in lieu of retirement income, what approach should be used to determine pension benefits, and whether to retain immediate vesting and portability in retirement accounts.

Mr. Schotland and other critics of T.I.A.A. and C.R.E.F. have called for a study of similar issues.

The National Education Association announced last week that Mr. Schotland and Mr. Edwards of T.I.A.A. and C.R.E.F. would be featured in a symposium it is sponsoring here on June 17, just before the annual meeting of the American Association of University Professors. Irving J. Spitzberg, Jr., general secretary of the A.A.U.P., said it strongly endorsed plans for a national study.

"What we need and what we don't get from the debate" in the business officers' magazine, he said, "is a careful study of the retirement needs of faculty." The issue, he said, is to determine "what is required for a faculty member to retire and live a decent life."

D. Francis Finn, executive vice-president of the business officers' association, said he was optimistic that a study would be made, but cautioned that "there is no one easy answer on how to handle all this."

COMPUTERS

Quantity vs. Quality; Job Tips

"Informational clutter" is a danger in the computerization of higher education, warns a report at Brown University, explaining the university's plan to equip every student, faculty member, administrator, and staff member with a "personal computer work station" by 1989.

"Clearly there are some intellectual dangers to the ability to accumulate and store larger quantities of information and ideas, and to be able to produce written material quickly," the report says.

"These are drawbacks of informational clutter—of quantity of data and opinion replacing quality of thinking.

"In fields where the amount of tangential or ill-conceived scholarly production is proliferating, the work station presents an insidious temptation to over-produce. Scholars may yield to the inclination to produce work that is largely a collection of information and ideas, rather than a well-thought-out project.

"Against such drawbacks must be weighed the possibilities for engaging in even richer syntheses and creative scholarship than one may be capable of now."

A minor in computer science is often recommended to students by professors and administrators, according to a new book, *The Fast Track to the Top Jobs in Computer Careers*, published by GD/Pedigree Books.

"Soon," says the author, Peter Muller, "computers will be used in virtually every career," and there will be a definite advantage for the person who combines a minor in computer science with a major in another field such as business, economics, engineering, or the natural sciences.

■

The full text of 18 journals of the American Chemical Society will be available in a computerized file beginning June 1. In a joint announcement with Bibliographic Retrieval Services, Inc., the chemical society said the journal texts from 1980 until the present will be available for computerized search, display, and printing. The file will be updated every two weeks. Fees for use of the file will range from $66 to $85 per hour, plus telephone-line charges.

—JACK MAGARRELL

FACT-FILE—Continued

	December 31, 1982		December 31, 1981	
	Shares	Market value	Shares	Market value
Textile & apparel				
Angelica	15,000	$ 517,500	—	—
Burlington Industries	100,000	2,800,000	—	—
Cluett, Peabody	65,000	1,381,250	—	—
Guilford Mills	25,000	512,500	—	—
INTERCO	75,000	4,575,000	—	—
Levi Strauss	105,000	4,042,500	—	—
M. Lowenstein	10,100	371,175	—	—
NIKE Class B	53,000	2,391,625	—	—
Oxford Industries	11,200	245,000	—	—
Warnaco	33,100	1,485,362	—	—
Wolverine World Wide	40,000	835,000	—	—
Subtotals		**$19,156,912**		—
Tobacco				
American Brands	139,400	$ 6,394,975	139,400	$ 5,122,950
Philip Morris	859,500	51,570,000	700,000	34,125,000
R. J. Reynolds	669,751	34,157,301	571,700	26,941,363
$11.50 cum. conv Pfd. B	3,125	326,953	—	—
United States Tobacco	10,000	703,750	—	—
Subtotals		**$93,152,979**		**$66,189,313**
Trucking and related industries				
Consolidated Freightways	116,500	$ 5,825,000	521,500	$20,599,250
Leaseway Transportation	322,500	12,577,500	587,500	15,495,312
RLC	450,000	4,050,000	324,400	3,933,350
Roadway Services	50,000	2,862,500	—	—
Ryder System	376,849	18,936,662	747,048	21,944,535
Transway International	25,000	668,750	—	—
Yellow Freight System	125,500	2,384,500	125,500	1,976,625
Subtotals		**$47,304,912**		**$63,949,072**
Utilities–electric				
Allegheny Power System	150,000	$3,562,500	600,000	$ 9,675,000
American Electric Power	1,383,253	24,552,741	776,426	12,616,923
Arizona Public Service	180,000	4 387,500	450,000	8,718,750
Baltimore Gas & Electric	99,213	2,852,374	—	—
Boston Edison	8,500	221,000	—	—
Carolina Power & Light	175,464	3,772,476	293,073	5,934,728
Central & South West	712,000	12,371,000	700,000	9,712,500
Central Illinois Public Service	50,000	775,000	—	—
Central Louisiana Electric	15,000	219,375	—	—
Cincinnati Gas & Electric	130,000	2,421,250	235,100	3,702,825
Cleveland Electric Illuminating	425,000	8,393,750	750,000	12,000,000
Commonwealth Edison	1,023,078	25,832,719	818,022	16,258,187
Consolidated Edison Co. of New York	310,000	6,355,000	—	—
Consumers Power	965,000	18,938,125	1,870,000	32,023,750
Dayton Power and Light	100,000	1,725,000	—	—
Detroit Edison	1,352,121	17,746,588	1,168,127	13,287,451
Utilities–electric				
Duke Power	850,000	19,762,500	850,000	17,531,250
Duquesne Light	255,000	3,761,250	—	—
El Paso Electric	149,000	1,825,250	—	—
Florida Power & Light	371,828	13,478,765	236,435	6,945,278
Florida Progress	110,000	2,090,000	—	—
Gulf States Utilities	970,000	12,973,750	—	—
Houston Industries	190,000	3,800,000	—	—
Illinois Power	187,539	4,454,051	112,627	2 322,932
Kansas Gas and Electric	164,700	3,026,362	—	—
Long Island Lighting	261,000	4,469,625	—	—
Middle South Utilities	1,728,563	25,712,375	2,132,004	26,916,551
Minnesota Power	9,000	213,750	—	—
New England Electric System	105,646	3,512,729	—	—
New York State Electric & Gas	99,700	2,156,013	—	—
Niagara Mohawk Power	650,000	10,156,250	400,000	4,950,000
Northeast Utilities	520,000	6,305,000	—	—
Northern Indiana Public Service	230,000	2,903,750	—	—
Northern States Power	168,600	5,058,000	—	—
Ohio Edison	874,241	12,239,374	761,285	8,849,938
Oklahoma Gas & Electric	50,000	968,750	—	—
Pacific Gas & Electric	991,470	27,885,094	1,110,000	23,310,000
Pacific Power & Light	190,000	4,013,750	—	—
Pennsylvania Power & Light	273,223	5,737,683	200,000	3,425,000
Philadelphia Electric	813,000	13,821,000	400,000	5,450,000
Potomac Electric Power	165,000	3,011,250	—	—
Public Service Co. of Colorado	210,000	3,648,750	—	—
Public Service Co. of Indiana	391,745	9,744,657	100,000	2,025,000
Public Service Co of New Mexico	162,000	4,212,000	—	—
Public Service Co. Electric & Gas	733,291	17,049,016	998,086	17,965,548
Puget Sound Power & Light	153,200	2,355,450	—	—
San Diego Gas & Electric	210,000	3,622,500	—	—
Southern California Edison	785,654	27,596,097	1,162,165	33,412,244
Southern	1,792,323	28,005,047	1,863,346	22,360,152
Southwestern Public Service	170,000	2,868,750	—	—
Texas Utilities	843,615	19,824,952	407,250	7,992,281
Toledo Edison	84,000	1,764,000	—	—
Union Electric	276,000	3,795,000	—	—
United Illuminating	9,000	229,500	—	—
Utah Power & Light	200,000	4,200,000	—	—
Virginia Electric and Power	790,000	11,356,250	200,000	2, 350,000
Wisconsin Electric Power	256,090	5,826,048	—	—
Subtotals		**$473,560,736**		**$309,736,288**
Utilities–gas and pipeline				
American Natural Resources	565,923	$18,958,421	514,135	$ 21,593,670
Arkla	127,900	2,238,250	—	—
Columbia Gas System	8,000	231,000	—	—
Consolidated Natural Gas	780,000	18,427,500	400,000	20,300,000
Utilities–gas and pipeline (Continued)				
El Paso	500,000	11,375,000	100,000	2,487,500
ENSERCH	437,200	8,306,800	50,000	1,262,500
Equitable Gas	28,600	686,400	—	—
Houston Natural Gas	202,800	7,250,100	—	—
InterNorth	9,000	240,750	—	—
Midcon	335,992	8,651,794	216,792	5,961,780
NICOR	29,000	801,125	—	—
Northwest Energy	16,000	254,000	—	—
ONEOK	14,576	388,086	—	—
Pacific Gas Transmission	263,700	4,087,350	100,000	2,837,500
Pacific Lighting	96,600	2,741,025	—	—
Panhandle Eastern	814,131	21,370,939	935,451	34,377,824
Peoples Energy	110,698	1,093,143	216,792	1,734,336
Primark	105,552	2,586,024	—	—
Sonat	250,000	6,625,000	—	—
Southern Union	74,000	1,248,750	—	—
Tenneco	1,694,888	54,871,999	900,000	30,150,000
Texas Eastern	410,400	23,803,200	289,300	15,188,250
Texas Gas Transmission	600,000	15,975,000	600,000	21,000,000
Texas Oil & Gas	764,100	25,979,400	375,000	13,125,000
Transco Energy	90,000	2,306,250	—	—
United Energy Resources	800,700	21,718,987	982,200	40,515,750
Valero Energy	359,300	8,713,025	100,000	2,287,500
Washington Gas Light	60,000	1,522,500	—	—
Subtotals		**$272,451,818**		**$212,821,610**
Utilities–telephone				
American Telephone & Telegraph	7,711,556	$457,873,638	7,280,543	$ 427,731,954
Bell Canada	1,472,042	29,072,829	1 635,417	26,779,955
Centel	124,501	4,653,225	301,000	9,970,625
Continental Telecom	1,914,902	33,032,059	2,221,891	37,494,427
General Telephone & Electronics	1,585,100	65,781,650	2,050,100	65,603,200
Rochester Telephone	65,000	1,746,875	—	—
Southern New England Telephone	30,000	1,792,500	—	—
United Telecommunications	1,281,634	26,754,110	1,457,970	31,710,863
Subtotals		**$620,706,886**		**$599,291,024**
Foreign investments, by country				
Australia	—	$42,518,508	—	$34,463,044
Belgium	—	11,969,013	—	8,432,138
Canada	—	77,826,833	—	43,723,559
France	—	22,238,522	—	23,227,963
Hong Kong	—	13,082,747	—	19,495,173
Japan	—	345,801,053	—	236,834,277
Mexico	—	578,125	—	2,386,875
Netherlands	—	23,654,599	—	15,474,713
Singapore/Malaysia	—	18,693,815	—	15,074,905
Spain	—	9,161,431	—	10,503,779
Sweden	—	15,532,535	—	9,068,495
Switzerland	—	39,613,418	—	28,155,666
United Kingdom	—	150,442,942	—	97,136,490
West Germany	—	58,098,961	—	39,606,690
Subtotals		**$829,212,502**		**$583,583,767**
Total market value		**$11,475,822,783**		**$8,911,689,501**

SOURCE: COLLEGE RETIREMENT EQUITIES FUND

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News Summary

Articles on inside pages

The people of Lake Wobegon, Minn., traveled east recently when Garrison Keillor brought his radio show, "A Prairie Home Companion" to Middlebury College. Story on Page 7.

Walter F. Mondale, the leading Democratic candidate for President, has proposed an $11-billion plan to aid education. Story on Page 15.

A civil-rights group asked the House to slash the budget of the Justice Department's civil-rights division because it believes the agency does little good. Story on Page 17.

A Senate committee has approved a bill that would provide nearly $1-billion over two years for programs to train science and mathematics teachers. Story on Page 17.

The State Department will bar visas to foreign visitors who it suspects may illegally obtain technical information useful to adversaries of the U.S. Story on Page 21.

A nationwide study of the academic performance of college athletes will be commissioned by the National Collegiate Athletic Association. Story on Page 23.

Faculty members are discovering there is much to be gained by teaching their students library skills—and enlisting librarians' help in doing it. Story on Page 27.

In his new book, *The First Urban Christians,* Wayne A. Meeks describes the social world of the Apostle Paul. Story on Page 29.

Student groups in France have called for national demonstrations on May 24 to protest proposed higher-education reforms. Story on Page 25.

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Michigan to Study State Campuses; Some Could Shut

By GLEN MACNOW

DETROIT

Anticipating a decade of declining enrollments and shrinking resources, Michigan's lawmakers have called for a re-examination of the state college system that could lead to the closing of some institutions.

The Michigan House of Representatives voted last month to establish a panel of experts to study the future of the state's 15 public universities and 29 community colleges. The Senate is expected to adopt a similar measure this month.

Many observers familiar with legislators' views say the study panel could be the first step toward the closing of several colleges or the establishment of statewide coordination of the now autonomous system, the fifth largest in the United States.

"We expanded as if there were no tomorrow during Michigan's growth period of the 1950's and 60's," said Sen. Jack Faxon, a Democrat from Southfield and chairman of the education appropriations subcommittee. "Now that the state is in a long period of of retrenchment, it's wise for us to re-examine higher education. I don't think we can afford to support a system as large as the one we have built."

Indeed, Michigan has had trouble maintaining its 450,000-student system in recent years. As the automobile-based economy slumped and its unemployment rate rose, education took the brunt of the cuts in the state budget. Former Gov. William Milli-

Continued on Page 16, Column 1

Mastery of 6 Basic Subjects and 6 Intellectual Skills Urged for College-Bound Students

College Board outlines the abilities they need for success

By BEVERLY T. WATKINS

WASHINGTON

High-school students who intend to go to college should master a comprehensive body of knowledge that includes six basic academic subjects, the College Board said last week. The subjects are English, mathematics, science, social studies, foreign language, and the arts.

To study effectively in any of those areas, college-bound students should also develop a group of six specific intellectual skills and abilities, the board said in a report released here. They include reading, writing, speaking and listening, mathematical ability, reasoning, and studying.

The report, "Academic Preparation for College: What Students Need to Know and Be Able to Do," was prepared by the board as part of the Educational EQuality [sic] Project, a 10-year effort to develop and implement a national standard for academic achievement in secondary education. It is intended as a guide for high schools to use in evaluating and revising their academic standards and curricula.

Excerpts from the College Board's report begin on Page 14.

At a press conference here, the College Board's president, George H. Hanford, said the recommendations offered a way to address "at least one of the most important problems of educational quality" documented in recent weeks by the National Commission on Excellence in Education and other groups.

He called the board's report "the first

Continued on Page 14, Column 1

U.S., Universities, and Industry Advised to Coordinate Efforts

By MALCOLM G. SCULLY

WASHINGTON

Warning that the United States has lost its lead in the global economic competition, a group of academic and business leaders this week called for a coordinated effort by universities, private companies, and the federal government to "rebuild the American economy and strengthen our educational system."

In a report released here, the group said, "Our society must develop a consensus that industrial competitiveness on a global scale is crucial to our social and economic well-being.

"Unless we rebuild the American economy and strengthen our educational sys-

Continued on Page 10, Column 1

COACH CUTS SCHOLARSHIPS

'I Guess I Understand It,' Says Player Who Lost Aid

By N. SCOTT VANCE

Steven Snyder, a freshman at the University of North Dakota, says he is still surprised that his institution "treats college athletics so much like a business."

The realization initially hit him about three weeks ago, when he and three of his basketball teammates had the amount of their athletic scholarships cut by half.

Their coach, David Gunther, told them he was reducing their financial aid because they had performed poorly on the court this past season—the coach's first losing season in his 13 years at the university.

Another basketball player, a junior, had his entire scholarship revoked for the same reason. The university's athletic director has assured him, however, that he will get aid from other sources to complete his senior year and to continue in his role as a standout on the university's baseball team.

In explaining his decision to reduce the players' aid, Mr. Gunther said in an interview that athletic scholarships should be "earned" by players, not just given to them for four years regardless of their performance on the playing court or field.

The five players involved, he said, didn't do their part to help the team and therefore didn't deserve the full scholarships they had been receiving.

Mr. Gunther said that in evaluating his players' overall perform-

Continued on Page 24, Column 1

POP AND CIRCUMSTANCE

DAVID GRUNFELD

One stuck cork at Syracuse U.'s commencement didn't hold up the bubbly celebration.

Thousands of Mail-Order Degrees Sold, FBI Finds

CHARLOTTE, N.C.

A three-year review by the Federal Bureau of Investigation of the activities of "mail-order universities" has revealed that they have sold "thousands" of degrees—including bachelor's, master's, and doctoral degrees in every discipline.

A spokesman for the agency said many educators were among those purchasing advanced degrees, apparently because they hoped to collect the salary increases that such degrees often bring to those who possess them.

The F.B.I. investigation, headquartered here, has thus far led the agency to seek search warrants with which to examine the records of 38 "institutions" in eight states, the spokesman said. Subpoenas have been issued for the records of other concerns, most of them operated out of post-office boxes or through mail-forwarding services.

The eight states are Arizona, Arkansas, California, Florida, New York, North Carolina, Ohio, and South Carolina. The agency has identified neither the institutions under investigation nor any of those suspected of aquiring degrees from them.

The investigation began in 1980, when someone told F.B.I. officials here that he had recently purchased a college degree and a transcript to back it up. Since then, one agent has been working full time on the case, and has been assisted by other agents who have written away for degrees.

The spokesman said the agents here had acquired a total of 23 degrees, including bachelor's and master's, Ph.D.'s, M.D.'s, and at least one doctoral degree in theology. "Whatever field you can think of, we have a degree in it," the spokesman said.

Prices for the degrees ranged from between $200 and $400 for bachelor's degrees to $2,000 for a combined master's and doctoral degree.

The F.B.I. will attempt to prosecute the operators of the degree services for wire fraud and mail fraud, the spokesman said. The agency itself will not try to prosecute all those who have purchased fake degrees, he said, because to do so "would tie up the federal courts here for years."

Instead, the F.B.I. will provide officials in each state with the names of its residents—including those in teaching posts—who are thought to have acquired their degrees by purchasing them.

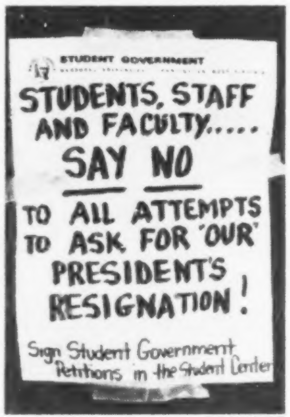
---

bearing the signatures of about 75 faculty members and 1,500 students at the university.

Organizers of the petition drive contend that the institution's conservative orientation and links to the Reagan Administration make it highly partisan and threaten the independence of the university. The faculty petitions were submitted to the Faculty Senate, which is expected to discuss the issue May 26. The student petitions were given to the university's Board of Trustees, which has not indicated whether it will take up the matter.

Meanwhile, a petition drive against an inquiry has been started by other faculty members. One organizer, Alphonse Juilland, who is chairman of the department of French and Italian, termed the call for an inquiry a "liberal witch hunt."

Marshall U. President Quits Under Pressure


STUDENT GOVERNMENT
STUDENTS, STAFF AND FACULTY.... SAY NO TO ALL ATTEMPTS TO ASK FOR 'OUR' PRESIDENT'S RESIGNATION!
Sign Student Government Petitions in the Student Center

WIDE WORLD

The president of Marshall University resigned last week despite widespread support from students and faculty members. Robert B. Hayes, who became president in 1974, had been under pressure from the West Virginia Board of Regents to step down for several months, in part because of a projected $150,000 deficit in the athletic-department budget. An audit of the department's books is now under way.

Support for Mr. Hayes, which a spokesman called "overwhelming," continued to grow until he announced his resignation May 11.

Supporters urged students and faculty members to sign petitions, at left, to send to the regents. Graduates and their guests at the recent commencement gave the president a standing ovation.

Mr. Hayes, whose action becomes effective August 31, will remain at Marshall as a professor of education.

Earthquake Damages California College

West Hills Community College, which sustained $1.7-million in damage from the earthquake that hit Coalinga, Cal., on May 2, reopened last week after being closed for four days. In the quake's aftermath, the campus was used as the main disaster-relief center by the Red Cross, California National Guard, and other agencies. No one at the college was injured.

The college's theater building has been closed indefinitely because of structural damage. Part of the campus was cordoned off temporarily because of fears of an explosion from chemical spillage in college laboratories.

University Travel Agency Wins Court Approval

The University of Minnesota has the right to run a student travel agency and sell airline tickets to students planning overseas travel, a county court has decided.

The decision came in a suit filed against the university and the International Study and Travel Association, a nonprofit student organization, by two commercial travel agencies, which charged that the university had exceeded its authority and was engaging in unfair competition.

The university argued that the student travel agency, on the Minneapolis campus, was an integral part of the institution's effort to promote international education.

The student travel agency has been licensed by the International Air Transport Association since 1981 to sell airline tickets.

Notes

Governor Allen I. Olson of North Dakota has signed a measure that will, on July 1, change the name of Minot State College to Dakota Northwestern University. . . . The National Governors' Association and Duke University have established a cooperative program at Duke for the study of issues of state government. The Governors Center will grant fellowships to former governors and state officials and offer graduate training for service in state government. . . . Six buildings and 10½ acres of land used by the U.S. Bureau of Mines is being purchased by Carnegie-Mellon University for $5.8-million. The bureau complex, which adjoins the university campus, will allow Carnegie-Mellon to expand its educational and research facilities.

CORRECTION

Due to errors in computation, some figures in the survey of college resources were incorrect (*The Chronicle*, May 4). The correct figures for new students at private research universities, public two-year institutions, and all institutions are in the tables below.

Staff members

	1981-82	
	Number of staff members	New students (a) per staff member
PROFESSIONAL EMPLOYEES		
Public research universities	9.5	544
Private research universities	4.0	365
Public comprehensive colleges (b)	8.7	167
Private comprehensive colleges (b)	6.9	115
Selective liberal-arts colleges	5.9	90
Other liberal-arts colleges	4.8	81
Public 2-year institutions	3.8	1,504
Private 2-year institutions	3.5	89
All institutions	**6.0**	**648**
CLERICAL STAFF		
Public research universities	15.5	332
Private research universities	6.2	236
Public comprehensive colleges (b)	11.6	125
Private comprehensive colleges (b)	4.9	162
Selective liberal-arts colleges	5.7	94
Other liberal-arts colleges	2.4	163
Public 2-year institutions	8.7	625
Private 2-year institutions	1.7	184
All institutions	**8.8**	**336**
STUDENT STAFF (c)		
Public research universities	4.4	1,175
Private research universities	1.9	763
Public comprehensive colleges (b)	8.3	186
Private comprehensive colleges (b)	3.8	211
Selective liberal-arts colleges	2.1	252
Other liberal-arts colleges	1.9	215
Public 2-year institutions	1.2	4,647
Private 2-year institutions	1.6	200
All institutions	**3.8**	**1,901**

(a) A new student is defined as a freshman or a transfer.
(b) Institutions with more than 1,500 students, a liberal-arts program, and at least one professional program.

Volunteers

	1981-82	
	Number of volunteers	New students (a) per staff member
STUDENT VOLUNTEERS (c)		
Public research universities	1.0	5,791
Private research universities	2.2	669
Public comprehensive colleges (b)	14.0	103
Private comprehensive colleges (b)	1.2	612
Selective liberal-arts colleges	1.0	520
Other liberal-arts colleges	0.9	528
Public 2-year institutions	4.5	1,208
Private 2-year institutions	—	—
All institutions	**6.1**	**1,110**
FACULTY & STAFF VOLUNTEERS (d)		
Public research universities	1.0	4,225
Private research universities	1.4	1,010
Public comprehensive colleges (b)	3.4	378
Private comprehensive colleges (b)	1.2	610
Selective liberal-arts colleges	0.5	1,018
Other liberal-arts colleges	0.8	971
Public 2-year institutions	0.9	5,797
Private 2-year institutions	0.5	692
All institutions	**1.6**	**2,814**
ALUMNI VOLUNTEERS (d)		
Public research universities	0.6	8,944
Private research universities	2.2	668
Public comprehensive colleges (b)	2.8	568
Private comprehensive colleges (b)	2.0	345
Selective liberal-arts colleges	2.9	185
Other liberal-arts colleges	0.9	702
Public 2-year institutions	—	—
Private 2-year institutions	0.6	666
All institutions	**1.2**	**1,192**

(c) One full-time equivalent is 1,400 hours annually.
(d) One full-time equivalent is 1,900 hours annually.
— Insufficient data.

SOURCE: SURVEY FOR THE CHRONICLE BY JOHN MINTER ASSOCIATES

Notes on . . . Science

What's DNA? According to a recent nationwide survey, 63 per cent of the 15,000 Americans who were asked that question said they simply "don't know."

About 2 per cent of the public said they thought DNA was some kind of "poison," according to a report of the survey by Cambridge Reports, Inc. of Cambridge, Mass., while 27 per cent began to make the proper connections, saying they thought it had something to do with genes, molecules, or chemicals in the body.

Only 2 per cent gave the correct answer: DNA is an acronym for deoxyribonucleic acid, a molecule shaped in a double helix that can make copies of itself and pass on biological traits to succeeding generations.

▪

A biologist at Harvard University has found evidence of the earliest major mass extinction of life on earth.

Andrew H. Knoll, an associate professor of biology, said he and Gonzalo Vidal, a professor of geology at Lund University in Sweden, had found evidence of the widespread disappearance of many types of one-celled algae about 650 million years ago. It occurred in several regions, including Scandinavia, the Baltic region, and eastern Greenland, the scientists told the National Science Foundation, which supported their research.

Before their discovery, the oldest known major extinction was one that occurred some 450 million years ago, when many species of shell-covered marine animals disappeared.

Mr. Knoll said the researchers had not yet determined the cause of the earliest mass extinction, when as many as 70 per cent of the known algal species disappeared. However, he said, they speculate that "it may have been related to environmental changes during a widespread glacial period that occurred at about the same time."

▪

The National Academy of Sciences has announced plans to publish a quarterly journal devoted to issues of science policy.

A spokesman said the journal, which will be published by the academy's press, would attempt, through essays written by scientists, to "provide insights of the science and technology community to policy makers in and out of government."

The academy has not yet selected a name or editor for the new publication.

▪

The first academic conference detailing the impact on society of the second industrial revolution—that created by developments in microelectronics—was held last week at the University of California at Santa Cruz.

The conference was sponsored by the Silicon Valley Research Project, a group of faculty members and students at Santa Cruz. The group plans to publish an edited volume of the conference proceedings for scholars, legislators, and the public.

—KIM McDONALD

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News Summary

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The federal government will soon propose rules designed to crack down on students who declare financial independence in order to qualify for additional aid. Story on Page 9.

Committees in the Senate and the House of Representatives that deal with issues in higher education—with the names of members and appropriate staff contacts—are listed on Pages 12-17.

The government is again trying to exclude Guaranteed Student Loans from the definition of financial aid that subjects colleges to civil-rights laws. Story on Page 9.

Most private colleges had received more freshman applications by March 31 this year than by that date last year. Story on Page 4.

Faculty members need to be more self-reliant and less dependent on their institutions, according to a recent proposal. Story on Page 27.

The rising costs of producing books, and libraries' decreasing ability to buy them, are creating friction between scholarly publishers and librarians. Story on Page 29.

French students responsible for demonstrations against proposed reforms in higher education are divided over whether their protest should remain nonpolitical. Story on Page 25.

United Nations University has its headquarters in Tokyo, but its mission is global: to seek answers to some of the world's most pressing problems. Story on Page 25.

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TATES CARTELIZATION'

NCAA's Control of Football Games on TV in Doubt After Court Ruling

By N. SCOTT VANCE

The National Collegiate Athletic Association is again scrambling to regain control over the televising of college football, after a federal appeals court reaffirmed a ruling that struck down its three contracts with broadcasters, calling them violations of antitrust law.

This week the N.C.A.A. will ask the appeals court to reconsider its action. If that fails, the association will appeal to the U.S. Supreme Court.

The appeals court's decision appeared to open the door for colleges and universities, individually or in groups, to negotiate their own contracts for televising games between their teams.

A 'Safety-Net Package'

The College Football Association, a group of 61 institutions with high-powered football programs, said it would decide next week whether to negotiate its own, one-year TV deal for the upcoming season. Such a plan would be a "safety-net package which would use the framework of the N.C.A.A. plan, with modifications as required by the courts," said Joab L. Thomas, chairman of the C.F.A. and president of the University of Alabama.

It was unclear whether such an arrangement would be developed to include institutions that are not now members of the C.F.A., but representatives of some of those institutions said they would favor such an arrangement on a temporary basis.

The C.F.A. has already developed a long-range plan for the marketing of its members' football games to broadcasters but has said it will not try to carry it out for the forthcoming season. Such a contract will not be negotiated for the fall season, said Mr. Thomas, because the matter is not "completely resolved legally."

In a 2-to-1 decision, a panel of the U.S. Court of Appeals for the Tenth Circuit in Denver ruled that the N.C.A.A. had too much control over the televising of college football, both by requiring its members to take part in its contracts and by dictating the prices that television networks must pay for all football games. The lawsuit was brought by the Universities of Georgia and Oklahoma, which wanted the right to negotiate their own TV deals.

The appeals court sent the case back to the district court that originally heard it, with a recommendation that the judge, Juan C. Burciaga, make some changes in his order.

The panel also suggested that Judge Burciaga give some clear indication of whether the N.C.A.A. would be allowed to involve itself in making arrangements for televising football games in the future. His original decision seemed to indicate that the N.C.A.A. was to stay completely out of the

Continued on Page 23, Column 1

Questions, answers, and speculation about the latest court ruling on televised college football appear on Page 23.

Public-Private Competition Intensifying

'Warfare' seen developing over funds and students

By JACK MAGARRELL

Competition between public and private colleges is intensifying.

The polite talk about working together for the good of all higher education goes on, but some leaders on both sides of the fence warn of rising tensions and a potential for outright antagonism.

"What was once a more or less friendly rivalry for quality in programs has become an unhealthy scramble for students and resources," says Frank H.T. Rhodes, president of Cornell University. "And what was once restricted to good-natured jockeying for position at budget time has erupted in too many places into open warfare between the two sectors."

Private institutions, trying to avoid being priced out of the market by rising tuition rates, are asking state legislatures for more student-aid money.

Public institutions, trying to maintain quality in the face of tightened state budgets, are asking for more private money from corporations, foundations, and alumni.

Worry about the damaging consequences of such competition is dismissed by some officials of national associations, who see a general pattern of revived national concern for educational quality, of

Continued on Page 4, Column 4

A College Goes Under—but Not Without a Fight

Alumni and friends of Eisenhower hope to revive it, but observers doubt they'll succeed

By LAWRENCE BIEMILLER

SENECA FALLS, N.Y.

Eisenhower College's 25-meter indoor swimming pool was bone-dry to the bottom of its diving well, and there were birds roosting in the deserted gymnasium just down the hall. They stared impassively from the rafters while a security guard switched on the lights, row by row, until the gymnasium's vastness was brightly lit.

At one end, a podium and rows of chairs had been set up for the college's twelfth commencement, which was all but certain to be its last. Eighty-three seniors were to be graduated here last Saturday, 10 months almost to the day after the Rochester Institute of Technology announced it would close Eisenhower immediately and continue the college's well-regarded liberal-arts program for one final year on the R.I.T. campus 45 miles away.

The decision surprised virtually everyone here—especially those who had expressed relief when Eisenhower, which during its years of independence faced financial crises regularly, was merged into R.I.T. in 1979. Affiliation with R.I.T. had offered Eisenhower stability—stability backed by the institute's endowment of almost $58-million. Even those who had their doubts about a technical institution's commitment to the liberal arts did not—at least in 1979—dispute the assumption that Eisenhower had a better chance of surviving as part of R.I.T. than it did on its own.

But when R.I.T. decided after only three years to give up on Eisenhower, citing an inability to interest either students or donors in the college, a few people—among them Eisenhower students, alumni, and former trustees—were unwilling to let the place go without a fight.

Larry L. Lutz, Jr., a Seneca Falls lawyer who was a member of the college's charter class, last August sued R.I.T. on behalf of five students and an alumnus in an effort to keep the college open. Although the judge refused to prevent the

Continued on Page 6, Column 1

JAY MATRICCIANI

An East Coast Sport Spreads Nationwide

Men's lacrosse, long a popular spring sport on the East Coast, has spread throughout the country in the past decade. More than 180 colleges now field teams, but the sport is still dominated by such traditional powers as Johns Hopkins.

For details, see the "Athletics" section, which begins on Page 19.

CHRONICLE SURVEY

Applications for 1983 Freshman Class Reported Down 0.2 Pct. from Last Year

A majority of private colleges and universities had received more freshman applications by March 31 of this year than by the same date a year ago, according to a new Chronicle survey. At a majority of public institutions, however, the number of applications was down.

The survey found that 52.4 per cent of private colleges and universities had more applications for next fall's freshman class, while 53.9 per cent of public institutions had fewer applications.

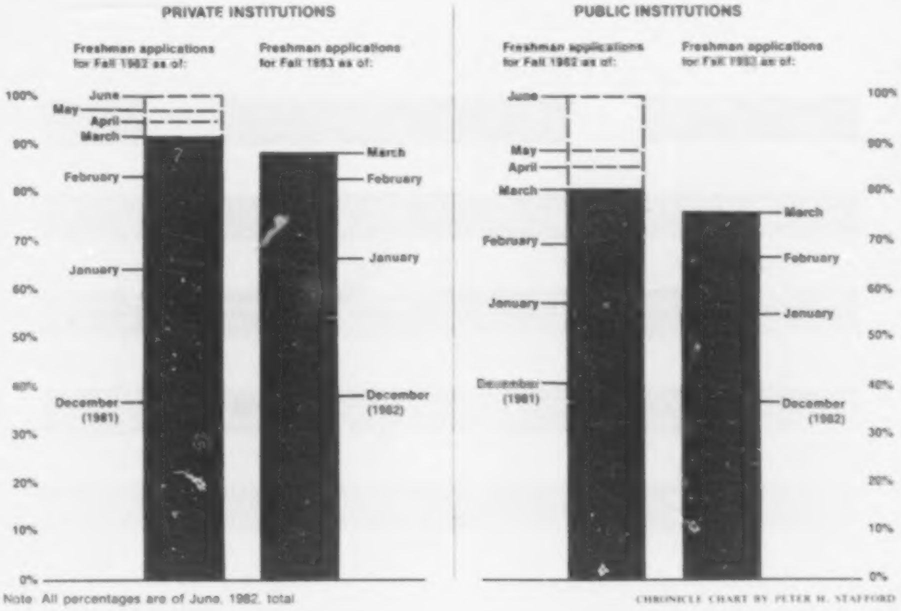
Slightly more than half of all institutions, public and private, had received more applications than they had a year ago.

The total number of applications was down 0.2 per cent.

The survey found that a majority of all institutions with between 500 and 1,000 students had received more freshman applications this year. Some 61.8 per cent of private institutions and 58.3 per cent of public institutions reported increases. For the private institutions, the increase was 8.3 per cent.

Applications were down at both public and private research universities.

The survey was conducted for *The Chronicle* by John Minter Associates, a higher-education research organization in Boulder, Colo.



Note: All percentages are of June, 1982, total

CHRONICLE CHART BY PETER H. STAFFORD

Changes in Number of Freshman Applicants

March 31, 1983, compared with March 31, 1982

	Per cent change in average (a)	Per cent reporting increase	Per cent reporting decrease	Per cent change: Low (b)	Per cent change: Median (c)	Per cent change: High (d)
Private colleges and universities						
Research and Ph.D.-granting	- 3.9%	26.1%	73.9%	- 10.6%	- 6.2%	+ 1.2%
Comprehensive	- 3.2%	42.7%	57.3%	- 10.0%	- 3.0%	+ 2.3%
Liberal arts	+ 1.0%	56.9%	43.1%	- 7.6%	+ 3.4%	16.6%
Regions						
Northeast and Mid-Atlantic	- 4.1%	38.6%	61.4%	- 9.8%	- 3.7%	+ 3.0%
Great Lakes and Plains	- 2.5%	52.4%	47.6%	- 8.4%	+ 0.8%	+ 14.8%
Southeast	+ 2.6%	60.0%	40.0%	- 5.0%	+ 1.7%	+ 13.5%
West and Southwest	+ 1.6%	52.8%	47.2%	- 9.3%	+ 0.7%	+ 9.1%
Enrollment						
500 - 999	+ 8.3%	61.8%	38.2%	- 7.9%	+ 6.9%	+ 28.9%
1,000 - 2,499	- 1.5%	47.9%	52.1%	- 8.8%	- 1.2%	+ 9.6%
2,500 - 4,999	- 3.0%	47.2%	52.8%	- 10.3%	- 3.2%	+ 2.5%
5,000 - 9,999	- 5.8%	39.1%	60.9%	- 11.6%	- 6.2%	+ 3.1%
10,000 and over	- 0.7%	33.3%	66.7%	- 7.5%	- 3.0%	+ 0.3%
All private institutions	**0.0%**	**52.4%**	**47.6%**	**- 8.8%**	**- 0.5%**	**+ 9.6%**
Public colleges and universities						
Research and Ph.D.-granting	- 1.3%	40.9%	59.1%	- 7.6%	- 3.0%	+ 4.0%
Comprehensive	- 0.3%	47.2%	51.4%	- 8.0%	- 0.8%	+ 9.3%
Regions						
Northeast and Mid-Atlantic	+ 0.5%	50.0%	50.0%	- 5.6%	- 0.8%	+ 7.3%
Great Lakes and Plains	- 2.6%	38.0%	60.0%	- 6.1%	- 3.0%	+ 2.5%
Southeast	+ 0.4%	50.0%	50.0%	- 8.9%	- 0.1%	+ 9.2%
West and Southwest	- 3.0%	40.0%	60.0%	- 12.8%	- 6.2%	+ 4.7%
Enrollment						
500 - 2,499	- 1.3%	58.3%	41.7%	- 12.2%	+ 3.0%	+ 10.0%
2,500 - 4,999	- 4.6%	33.3%	66.7%	- 12.0%	- 5.6%	+ 6.3%
5,000 - 9,999	- 2.7%	38.7%	61.3%	- 9.0%	- 4.2%	+ 6.4%
10,000 - 19,999	- 1.2%	41.5%	56.1%	- 5.8%	- 0.8%	+ 3.8%
20,000 and over	- 0.6%	48.8%	51.2%	- 6.7%	- 1.3%	+ 4.2%
All public institutions	**- 0.6%**	**46.7%**	**53.3%**	**- 7.7%**	**- 1.6%**	**+ 4.6%**
All institutions	**- 0.2%**	**50.1%**	**42.6%**	**- 8.1%**	**- 0.9%**	**+ 7.1%**

(a) Percentage change in mean number of applications by March 31, 1983, compared with the mean for a year earlier.
(b) The bottom one-fourth of the institutions reported changes smaller than the percentage shown.
(c) Half of the institutions reported changes greater than the percentage shown.
(d) The top one-fourth of the institutions reported changes greater than the percentage shown.
Note: Survey data are from a stratified random sample of 230 four-year colleges and universities, excluding those with enrollment under 500.

SOURCE: SURVEY FOR THE CHRONICLE BY JOHN MINTER ASSOCIATES

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Competition

Continued from Page 1

innovative public-private sharing of scarce resources, and of an economic recovery that will make the resources more plentiful. Indeed, one such official thinks "there is more cooperation than there has ever been."

But instances of renewed competitiveness abound:

► Bills introduced in the North Carolina legislature this month would increase general state aid to students in private institutions by more than 50 per cent—at a time, a public university's chancellor complains, when the state institutions are so short of money they can't pay their bills.

► A Connecticut compromise in a public-private turf battle allows a public university to offer a new graduate program in business but requires that students in the program take a fourth of their credits at a private institution.

► The University of Virginia, for the first time in its 164-year history, is engaged in a university-wide fund-raising campaign, seeking $90-million in three years.

► Northern Montana College has raised $350,000 in the first campaign by a public college in the state to finance a campus building with private funds.

► The University of California at Los Angeles—whose private fund-raising in 1981-82 was exceeded only by that of Harvard, Yale, and Stanford Universities—is studying the possibility of launching a five-year campaign with a goal of $150-million to $250-million.

Hard times, as the common enemy, have encouraged cooperation at the national level, says Jack W. Peltason, president of the American Council on Education, but in some states the competition has intensified.

"The battle over state funds is where you will more likely find this," he says. Usually, the general tone of the debate has been "kept within bounds," he adds, but competition can have "unintended consequences."

"We can lose public confidence," he says, "if we appear to be seeking only to protect our turf rather than serving the public interest."

May Generate More Money

John D. Phillips, president of the National Association of Independent Colleges and Universities, takes one of the most optimistic views of public-private competition.

"In raising the level of competition," he says, "we may also have succeeded in raising the level of awareness about the needs of higher education and generate more money rather than less."

Competition between public and private institutions, heightened by the economic difficulties of many states, may be eased when the economy improves, says Allan W. Ostar, president of the American Association of State Colleges and Universities.

One of the less negative results of hard times, Mr. Ostar says, has been a trend toward cooperation between public and private institutions, "sharing facilities and working together to make maximum use of the resources."

"There is no question that rather significant inroads have been made by public institutions' getting private support," says Gary H. Quehl, president of the Council of Independent Colleges. Private colleges, he says, are interested only in "trying to maintain the gains in public money that goes to private students."

"American higher education is probably the only American industry in which one sector is expected to compete with the other at a four-to-one disadvantage," he says.

The average tuition rate for private colleges and universities is 4.1 times as high as the average tuition rate at public institutions of higher education this year, according to the College Scholarship Service. The ratio is unchanged from 10 years ago.

Mr. Quehl praises an agreement—"almost a pact"—among officials of higher education's national organizations in Washington that "we are not going to make the case for one sector on the backs of another sector."

"From our standpoint," says Dale Parnell, president of the American Association of Community and Junior Colleges, "we think there is more cooperation than there has ever been."

"Under pressure you have to figure out how to do things better and a lot of times that means coalitions and consortiums. I'm seeing a lot more of that today than I have ever seen."

In local areas, he says, "there is always competition" for the decreasing number of people of college age, but it is not a "public-private problem."

While many private liberal-arts colleges are struggling to maintain their enrollment, he says, "private proprietary institutions have never had more students or made more money."

'Our Own Worst Enemies'

Cornell University's President Rhodes views the public-private competition from the unusual perspective of an institution that has four of its 12 schools and colleges supported by the state and the rest privately endowed.

In a speech at a spring meeting of the Association of Governing Boards of Universities and Colleges, Mr. Rhodes said:

"I fear that we are now becoming our own worst enemies; I fear that higher education may emerge from the current period of stress substantially less diverse, less credible, and less vital unless, together, we reaffirm the strength of our dual system and rededicate ourselves as ambassadors of higher education as a whole."

Christopher C. Fordham, III, chancellor of the University of North Carolina at Chapel Hill, blames economic pressures for "a new tension" in the competition between public and private institutions.

Writing in the newsletter of the National Association of State Universities and Land-Grant Colleges, Mr. Fordham says:

"In North Carolina and the Southeast, as well as nationally, private institutions are lobbying heavily, vigorously, and often effectively for state funds at the very time when public institutions are suffering because of inflation, recession, and both federal and state shortfalls.

"While claiming the lion's share of private funding from corporations, foundations, and individuals, the private institutions now seek further to undergird their budgets with tax funding. . . .

"This comes at a time when state institutions cannot pay their bills because of inadequate monthly alloca-

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News Summary

Articles on inside pages

D-Q University, an embattled American Indian college in California, may soon lose the title to the property on which its campus is located. Story on Page 2.

Community colleges received a larger share of their financial support from state funds in 1981-82 than in the previous year. Story on Page 8.

College football may be televised on Saturday nights if a "marketing concept" being considered by the College Football Association goes forward. Story on Page 19.

The football program at the University of Arizona has been put on two years' probation by the National Collegiate Athletic Association. Story on Page 19.

In addition to teaching an academic curriculum, many faculty members today must help students learn how to learn. Story on Page 25.

Boston will always be a college town—but it also has plenty of other things to recommend it, from the Boston Symphony to the Boston Red Sox. Story on Page 26.

The 1970's may have more in common with the 1960's than we realized, according to a new book by Peter Clecak. Story on Page 29.

The French government last week submitted to Parliament its proposal for the reform of higher education, while student protests continued. Story on Page 23.

Foreign faculty members who were expelled from the occupied West Bank have returned to their jobs there after signing a revised version of a controversial work-permit application. Story on Page 23.

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AVE!

GREGORY O. JONES

As others file out after commencement exercises at the University of Colorado, two stay behind to share their feelings about the event.

Growth in State Funds for Colleges Expected to Slow Further in 1984

By JACK MAGARRELL

WASHINGTON

A survey of the fiscal condition of the 50 states strongly indicates that for them—and for higher education—the recession is not over.

In the coming year, the increase in state appropriations for higher education may be even smaller than the current year's increase. The latest financial survey of the states shows they expect the rise in spending in fiscal 1984 to be even more constrained than this year's: 5.5 per cent.

State spending in fiscal 1983 is up an estimated 6.2 per cent, and higher education has received a proportionate share of the increase. Even so, it was the smallest one-year increase in state funds for colleges and universities in more than 20 years.

The survey findings, announced last week, are based on data compiled this spring by the National Governors' Association and the National Association of State Budget Officers. State appropriations account for about 30 per cent of all spending by colleges and universities, public and private.

The effect of the tightening limits on state spending may be softened by a slowdown in the inflation rate. Since last June the Consumer Price Index has increased at

Continued on Page 6, Column 1

Tax Exemption Denied Schools Practicing Bias

Supreme Court rejects plea of Bob Jones U.

By CHERYL M. FIELDS

WASHINGTON

Tax exemptions cannot be granted to schools and colleges that violate "fundamental public policy" by practicing racial discrimination, the Supreme Court ruled last week.

The 8-to-1 ruling rebuffed the Reagan Administration's contention that no law explicitly authorizes the Internal Revenue Service to deny tax exemptions to such institutions. It upheld circuit-court rulings that the Internal Revenue Service had not overstepped its authority in denying Bob Jones University and Goldsboro Christian Schools tax exemptions and tax deductibility for their donors' contributions.

Both the university, which bars interracial dating and marriage, and Goldsboro Christian Schools, which admit no blacks, cited religious grounds for their restrictive policies.

But the Court said the government's overriding interest in eliminating race discrimination in education far outweighed any financial burdens imposed on the institutions in the exercise of their religious beliefs.

In response to the ruling, officials at Bob Jones University lowered the U.S. and state flags on their Greenville, S.C., campus to half mast. The action, they said, symbolized the Court's "murdering of religious freedom."

"I fear for this country and for my chil-

Continued on Page 10, Column 1

Excerpts from the Supreme Court opinions on tax exemptions and racial discrimination begin on Page 10. Also in this issue:

- A federal appeals court has upheld North Carolina's college desegregation plan. Story on Page 9.
- President Reagan's three nominees to the U.S. Commission on Civil Rights are under attack. Story on Page 9.

'Wave of Reform' in Education Must Start with Schoolteachers, UCLA Dean Says

By BEVERLY T. WATKINS

NEW YORK

If it is to succeed, "the wave of reform" that is beginning to break over American education must begin with local schoolteachers and bring changes in present curricular and teaching practices, says an educational researcher who conducted a seven-year study involving more than 1,000 classrooms.

"We are trying to recreate in 1983 the kind of reform that Sputnik created in 1957," said John I. Goodlad, dean of the Graduate School of Education at the University of California at Los Angeles. "We may be able to do that, but the question is, Can we do it any better this time? As we go into this reform movement, we are more devoid of ideas than ever before."

The recent reports by the National Commission on Excellence in Education and

Continued on Page 7, Column 1

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2-Year Colleges Found Getting More State Funds

WASHINGTON

Two-year colleges received a larger share of their total financial support from state funds and a smaller share from local governments in 1981-82 than they did in the previous year, according to a new survey.

A study of community-college finances undertaken by the National Association of College and University Business Officers found that the median percentage of appropriations from the state had increased from 53.7 per cent in fiscal 1980-81 to 54.6 per cent in fiscal 1981-82.

In the same period, the median percentage of revenue from local governments decreased from 12.8 per cent to 12.2 per cent.

Median total revenues from appropriations to the community colleges amounted to almost 69 per cent for each of the two years.

The annual financial survey also found that revenue from tuition and fees accounted for a greater share of the budget last year.

The total of the two increased from a median of 16.7 per cent in 1980-81 to 17.4 per cent.

Spending $3,000 per Student

Revenues from gifts, grants, and contracts from public and private sources decreased from a median of 8 per cent to 7.6 per cent.

The median amount of total revenues per student increased from $2,878 in 1980-81 to $3,114 last year, the study found, while the median amount spent per student increased from $2,739 to $3,002.

The survey, which was based on data from 442 community and junior colleges, has been conducted every year since 1977-78 by the association of business officers, in cooperation with the American Association of Community and Junior Colleges, the Association of Community College Trustees, and the National Center for Education Statistics.

Other findings from the current survey indicated that half the institutions had continued to spend more than 60 per cent of their operating budgets on the academic areas of instruction, support, research, and public service.

65 Pct. for Academic Budgets

About one-quarter of the colleges spent more than 65 per cent of their operating budgets on academic matters. A small proportion of the budgets went for research and public service.

Half the colleges spent more than 36 per cent of their budgets on the administrative areas of student services, institutional support, and plant operation and maintenance in 1981-82—a decrease from 37 per cent the year before.

In 1981-82 half of the community colleges enrolled one in every 19 people in their service areas in either credit or noncredit courses, the survey found.

One-quarter of the institutions enrolled one in every 11 people.

Half of the colleges had a full-time-equivalent student-faculty ratio of 19 to 1, while one-quarter of the institutions maintained a ratio of 15 to 1.

■ COMPARATIVE FINANCIAL STATISTICS FOR PUBLIC COMMUNITY AND JUNIOR COLLEGES 1981-82 (National Association of College and University Business Officers, One Dupont Circle, Washington 20036; $25 each for members of the sponsoring associations, $30 for nonmembers).

FACT-FILE

Financing of Public Community Colleges, 1981-82: Where the Money Came From and How It Was Spent

	Enrollment under 5,000		Enrollment 5,000 to 15,000		Enrollment over 15,000		All institutions, 1980-81		All institutions, 1981-82	
	Median per student*	Per cent of total	Median per student*	Per cent of total	Median per student*	Per cent of total	Median per student*	Per cent of total	Median per student*	Per cent of total
Expenditures										
Total educational and general	$3,208	100.0%	$2,885	100.0%	$2,965	100.0%	$2,739	100.0%	$3,002	100.0%
Academic	1,833	59.4%	1,718	60.6%	1,824	63.3%	1,635	61.2%	1,800	60.8%
Instruction and research	1,567	49.5%	1,417	51.0%	1,534	52.8%	1,366	50.9%	1,517	50.9%
For credit instruction*	1,537	48.1%	1,371	49.1%	1,400	48.7%	1,305	48.0%	1,434	48.6%
For noncredit instruction**	—	0.2%	—	1.0%	—	1.5%	—	1.4%	—	0.6%
Public service	0	0.0%	3	0.1%	4	0.2%	4	0.1%	2	0.1%
Academic support	264	8.0%	228	8.3%	267	9.0%	215	8.2%	248	8.3%
Support services	1,158	37.6%	1,066	36.8%	1,049	35.3%	1,013	36.9%	1,085	36.4%
Student services	284	8.5%	246	8.1%	263	8.6%	237	8.6%	262	8.5%
Institutional support	464	15.6%	407	14.8%	427	13.6%	404	15.1%	425	14.6%
Plant operation and maintenance	389	12.7%	353	12.4%	358	12.1%	332	12.0%	368	12.3%
Utilities	130	4.4%	112	4.0%	118	3.7%	106	3.7%	121	4.0%
Other	239	7.9%	226	8.4%	237	8.0%	217	8.1%	235	8.1%
Scholarships and fellowships	47	1.6%	36	1.3%	35	1.1%	36	1.3%	37	1.3%
Revenues										
Total revenues (current fund, excluding auxiliaries)	$3,298	100.0%	$3,004	100.0%	$3,049	100.0%	$2,878	100.0%	$3,114	100.0%
Tuition and fees	535	15.9%	502	17.6%	632	19.7%	475	16.7%	553	17.4%
For credit instruction*	519	15.4%	477	17.0%	596	18.3%	447	15.7%	526	16.7%
For noncredit instruction**	—	0.1%	—	0.7%	—	1.0%	—	0.5%	—	0.5%
Appropriations	2,324	68.9%	2,060	69.7%	2,066	68.1%	1,961	68.6%	2,171	68.9%
Federal	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
State	1,711	53.1%	1,620	59.6%	1,527	51.6%	1,495	53.7%	1,608	54.6%
Local	217	5.3%	391	12.4%	452	17.2%	352	12.8%	374	12.2%
State and local combined	2,276	67.5%	2,021	68.8%	2,028	67.1%	1,928	67.9%	2,121	67.7%
Gifts, grants, and contracts	269	8.6%	212	7.4%	229	7.0%	223	8.0%	227	7.6%
Federal	156	4.6%	103	3.7%	125	4.3%	127	4.7%	126	4.1%
State and local	36	1.0%	34	1.1%	45	1.4%	33	1.2%	38	1.2%
Private	1	0.0%	5	0.2%	2	0.1%	1	0.1%	3	0.1%
Other revenues (excluding auxiliaries)	110	3.1%	95	3.1%	121	4.0%	92	3.4%	107	3.3%

— Data not available
* Based on number of full-time-equivalent students enrolled for credit
** Based on full-time-equivalent students enrolled in noncredit courses

SOURCE: NATIONAL ASSOCIATION OF COLLEGE AND UNIVERSITY BUSINESS OFFICERS

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News Summary

Articles on inside pages

Tenure at the University of Nevada has survived a recent battle between regents and faculty members. Story on Page 5.

Some scientists and religious leaders want to ban genetic experiments that would "irreversibly" alter the gene pool. Story on Page 7.

Twenty years have passed since Gov. George C. Wallace stood in a doorway at the University of Alabama and tried to block the enrollment of the university's first black students. Story on Page 3.

Nursing schools may be hit hardest by new rules to force health-professions schools to reduce delinquency rates in the student loans they administer. Story on Page 13.

A lawsuit by a former athlete against the University of Michigan and two coaches has been reinstated. Story on Page 17.

Getting a gift or grant from a computer company can depend on whom you know and how well your needs match the company's. Story on Page 25.

Turnover rates for college administrators are highest among some of those who work closest to presidents. Story on Page 25.

The study of folklore in the U.S. has come of age as a discipline, as the new *Handbook of American Folklore* attests. Story on Page 27.

Vista University, South Africa's first "university for blacks in the white area," opened earlier this year to criticism from opponents of apartheid. Story on Page 21.

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Job Market for College Graduates Called 'Bleak' for Rest of 1980's

By JACK MAGARRELL

The American economy is not expected to produce new high-level jobs as fast as college students are trained to fill them in the remaining years of this decade, a Stanford University researcher has warned.

"The outlook for the 1980's appears bleak," says Russell W. Rumberger, in a study of the job market for college graduates from 1960 to 1990.

"Employment growth will not produce widespread opportunities in high-level, high-technology fields, contrary to popular belief," Mr. Rumberger says. "In fact, employment growth in professional and managerial occupations will be smaller than in either the 1960's or the 1970's."

The number of new college graduates looking for jobs will grow more slowly during the 1980's than in the 1970's, he says, but the number of high-level jobs available for them will grow much more slowly.

An increasing number of graduates, he says, "will be forced to accept jobs incommensurate with their level of training."

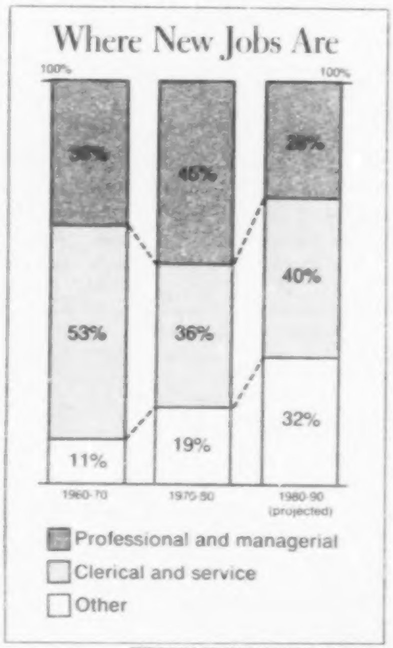
Debate over Education's Value

The job-market analysis by Mr. Rumberger, a research associate at the Institute for Research on Educational Finance and Governance at Stanford, adds fuel to a continuing debate over the economic value of higher education in a time of changing employment patterns.

High-technology education is advertised by many colleges and universities as a student's best hope for success in the competition for jobs.

Leaving aside arguments over the relative merits of specialized versus general education as preparation for a fast-changing, technologically advanced world, there is disagreement over such fundamental

Continued on Page 12, Column 1



CHRONICLE CHART BY PETER H. STAFFORD
SOURCE: RUSSELL W. RUMBERGER

Stations Asked to Help Rescue Public Radio

NPR seeks $1.6-million of affiliates' 1984 grants

By MALCOLM G. SCULLY

WASHINGTON

The country's 281 public-radio stations have been asked to turn over a total of $1.6-million from their fiscal 1984 federal grants to help National Public Radio cope with a massive budget deficit.

In appealing to station managers for the transfer, Ronald C. Bornstein, the acting chief operating officer of N.P.R., said that without the $1.6-million, "this organization will close down."

Managers of the stations, 159 of which are affiliated with colleges and universities, were voting by mail last week on whether to agree to the request. Several said that, while they knew of some opposition, they expected a majority of the stations to approve the transfer.

Even if the stations agree, the move still would have to be approved by the board of the Corporation for Public Broadcasting, which allocates federal money to public radio and television stations in the form of "community-service grants." The C.P.B. board is scheduled to meet next week.

The appeal for $1.6-million was one of several steps considered by N.P.R.'s board

Continued on Page 10, Column 1

Sports Organizations Maneuvering to Get TV Negotiating Rights

By JOHN A. CROWL

DALLAS

Two major sports organizations are maneuvering to see which will be able to negotiate contracts to put intercollegiate football games on television this fall.

At its annual meeting here last week, the College Football Association unanimously approved a "contingency plan" for negotiating a television contract for the 1983 season if the National Collegiate Athletic Association is prevented from doing so by the courts.

This week, a subcommittee of the N.C.A.A.'s football television committee is meeting with lawyers to develop an "alternative plan" that would conform to federal antitrust laws and any court order that is handed down. It will present a plan to the full committee next week. The N.C.A.A. may call a meeting of all Division I football-playing institutions later this summer to act on the alternative plan.

A federal court order stripping the N.C.A.A. of its exclusive control over TV football contracts has been stayed until a court of appeals rules on the association's request for a rehearing. But, lawyers note,

Continued on Page 20, Column 1

Basic Skills of College-Bound Students Show Little Improvement, Survey Finds

By BEVERLY T. WATKINS

Campus officials see few signs of improvement in the academic preparation of college-bound students, according to a survey conducted for *The Chronicle*. Indeed, the survey found, students' command of basic skills and knowledge of the basic disciplines may be deteriorating.

About 60 per cent of the colleges and universities participating in the survey reported no change from the previous year in the reading, writing, and mathematical abilities—already widely conceded to be inadequate—of the new students coming to their campuses for the 1981-82 academic year. Between 25 and 30 per cent of the institutions said the academic skills of their freshmen and transfer students had actually decreased from the previous year. About 10 per cent said the skills of these students had increased.

About two-thirds of the institutions reported that there was no change in the new students' level of knowledge in science, the humanities, or social studies. Roughly one-fifth of the colleges found that their students had less grounding in these disci-

Continued on Page 8, Column 1

College Boxing: Down, but Not Out

Boxing is undoubtedly the most controversial sport on college campuses. Its advocates say boxing promotes discipline and courage and claim it is safer than football. Its opponents call it a brutal sport and point out its tragedies.

For details, see the "Athletics" section, which begins on Page 17.

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Basic Skills

Continued from Page 1

plines than did the new students in the previous year.

Despite the survey's findings about students' abilities at the time they entered college, it did indicate that higher-education institutions were trying—with some success—to raise academic standards and improve the quality of the learning environment. And the students, once they got to college, were working harder, campus officials said.

The survey supports the recent findings of the National Commission on Excellence in Education and several other groups, which concluded that American education in general is in a sorry state and that students are inadequately prepared in "the basics." In its report, the commission on excellence called for a stronger emphasis on academic subjects, recommending, among other things, that high-school students be required to take four years of English, three years each of mathematics, science, and social studies, and a half year of computer science.

The Chronicle survey, which was based on a stratified random sample of 300 public and private two-year and four-year colleges and universities, compared students' academic preparation in 1981-82 with the skills and abilities of students one year earlier. The information in the survey, which was conducted by John Minter Associates, was provided by the chief academic officers of the institutions.

About 70 per cent of the institutions reported that faculty members were using more innovative teaching methods. Some were cutting back on the traditional lecture-and-discussion approach and making greater use of laboratories and studio instruction. Others were increasing the amount of independent study and providing more opportunities for experiential learning, such as work-study programs or internships.

About 35 per cent of the colleges and universities said their students were working more conscientiously, while about half reported an increased interested in grades. About 20 per cent said students' overall academic achievement had improved.

The survey found that colleges and universities were making more job-related services available to their students, and the students, for their part, were taking greater advantage of them.

More than 40 per cent of the institutions said they had increased opportunities for career counseling, while more than 35 per cent said they had boosted their job-placement services.

About 60 per cent of the private colleges—both comprehensive four-year institutions and the smaller liberal-arts colleges—reported that they had expanded their job-related services.

Between 50 and 55 per cent of all institutions reported that students' use of career services had increased. However, about 75 per cent of the private colleges said use of their career-counseling facilities was up. Between 60 and 70 per cent of those colleges reported that use of job-placement services had grown.

Most colleges and universities reported little change in the scope of their psychological counseling and health-care services, although about one-fourth said more students were using the available psychological counseling.

CHRONICLE SURVEY

Views of Chief Academic Officers on Changes in the Learning Environment, 1981-82

Students' Academic Preparation

	Increased	No change	Decreased	Don't know
Reading skills				
Public research universities	15.4%	61.5%	15.4%	7.7%
Private research universities	25.0%	75.0%	0.0%	0.0%
Public comprehensive colleges*	16.1%	51.6%	29.0%	3.2%
Private comprehensive colleges*	6.1%	84.8%	9.1%	0.0%
Private liberal-arts colleges	13.2%	60.4%	24.5%	1.9%
Public 2-year institutions	8.3%	52.8%	36.1%	2.8%
Private 2-year institutions	0.0%	83.3%	16.7%	0.0%
All institutions	10.4%	61.4%	25.9%	2.2%
Writing skills				
Public research universities	15.4%	57.7%	23.1%	3.8%
Private research universities	12.5%	87.5%	0.0%	0.0%
Public comprehensive colleges*	22.6%	58.1%	16.1%	3.2%
Private comprehensive colleges*	9.1%	66.7%	24.2%	0.0%
Private liberal-arts colleges	11.3%	62.3%	26.4%	0.0%
Public 2-year institutions	8.3%	52.8%	36.1%	2.8%
Private 2-year institutions	0.0%	50.0%	50.0%	0.0%
All institutions	10.7%	58.1%	29.6%	1.6%
Mathematical skills				
Public research universities	26.9%	42.3%	26.9%	3.8%
Private research universities	25.0%	62.5%	12.5%	0.0%
Public comprehensive colleges*	19.4%	58.1%	19.4%	3.2%
Private comprehensive colleges*	21.2%	60.6%	15.2%	3.0%
Private liberal-arts colleges	20.8%	52.8%	26.4%	0.0%
Public 2-year institutions	5.6%	61.1%	30.6%	2.8%
Private 2-year institutions	0.0%	66.7%	33.3%	0.0%
All institutions	13.6%	58.4%	26.1%	1.9%
Humanities & social studies preparation				
Public research universities	11.5%	69.2%	11.5%	7.7%
Private research universities	0.0%	75.0%	12.5%	12.5%
Public comprehensive colleges*	9.7%	67.7%	12.9%	9.7%
Private comprehensive colleges*	0.0%	81.8%	9.1%	9.1%
Private liberal-arts colleges	3.8%	71.7%	20.8%	3.8%
Public 2-year institutions	5.6%	61.1%	22.2%	11.1%
Private 2-year institutions	0.0%	100.0%	0.0%	0.0%
All institutions	4.8%	71.0%	16.4%	7.8%
Science preparation				
Public research universities	15.4%	61.5%	19.2%	3.8%
Private research universities	25.0%	50.0%	12.5%	12.5%
Public comprehensive colleges*	12.9%	61.3%	19.4%	6.5%
Private comprehensive colleges*	12.1%	66.7%	15.2%	6.1%
Private liberal-arts colleges	7.5%	66.0%	24.5%	1.9%
Public 2-year institutions	5.6%	61.1%	30.6%	2.8%
Private 2-year institutions	0.0%	100.0%	0.0%	0.0%
All institutions	8.2%	66.2%	22.2%	3.5%

Students' Attitudes, Behavior, & Achievement

	Increased	No change	Decreased	Don't know
Conscientiousness				
Public research universities	57.7%	38.5%	3.8%	0.0%
Private research universities	25.0%	62.5%	12.5%	0.0%
Public comprehensive colleges*	38.7%	61.3%	0.0%	0.0%
Private comprehensive colleges*	45.2%	45.2%	6.5%	3.2%
Private liberal-arts colleges	20.8%	73.6%	3.8%	1.9%
Public 2-year institutions	36.1%	58.3%	2.8%	2.8%
Private 2-year institutions	33.3%	50.0%	16.7%	0.0%
All institutions	34.1%	59.5%	4.6%	1.7%
Interest in careers				
Public research universities	80.0%	15.4%	3.8%	—
Private research universities	75.0%	12.5%	12.5%	—
Public comprehensive colleges*	84.4%	15.6%	0.0%	—
Private comprehensive colleges*	81.8%	18.2%	0.0%	—
Private liberal-arts colleges	81.1%	18.9%	0.0%	—
Public 2-year institutions	75.0%	25.0%	0.0%	—
Private 2-year institutions	100.0%	0.0%	0.0%	—
All institutions	81.0%	18.4%	0.6%	—
Interest in liberal learning				
Public research universities	7.7%	46.2%	42.3%	3.8%
Private research universities	0.0%	25.0%	75.0%	0.0%
Public comprehensive colleges*	6.3%	43.7%	50.0%	0.0%
Private comprehensive colleges*	12.1%	51.5%	36.4%	0.0%
Private liberal-arts colleges	7.5%	56.6%	34.0%	1.9%
Public 2-year institutions	11.1%	41.7%	47.2%	0.0%
Private 2-year institutions	0.0%	50.0%	50.0%	0.0%
All institutions	8.2%	46.9%	44.4%	0.6%
Grade & credential consciousness				
Public research universities	69.2%	26.9%	3.8%	0.0%
Private research universities	75.0%	12.5%	12.5%	0.0%
Public comprehensive colleges*	68.7%	31.3%	0.0%	0.0%
Private comprehensive colleges*	56.3%	43.8%	0.0%	0.0%
Private liberal-arts colleges	50.0%	46.2%	1.9%	1.9%
Public 2-year institutions	52.8%	47.2%	0.0%	0.0%
Private 2-year institutions	16.7%	83.3%	0.0%	0.0%
All institutions	52.7%	45.8%	1.0%	0.4%
Participation in extracurricular activities				
Public research universities	23.1%	65.4%	3.8%	7.7%
Private research universities	0.0%	75.0%	25.0%	0.0%
Public comprehensive colleges*	12.9%	74.2%	12.9%	0.0%
Private comprehensive colleges*	15.6%	78.1%	3.1%	3.1%
Private liberal-arts colleges	13.2%	75.5%	5.7%	5.7%
Public 2-year institutions	11.1%	72.2%	13.9%	2.8%
Private 2-year institutions	33.3%	66.7%	0.0%	0.0%
All institutions	14.6%	73.0%	9.4%	3.0%

Students' Attitudes *Continued*

	Increased	No change	Decreased	Don't know
General academic achievement				
Public research universities	26.9%	65.4%	7.7%	0.0%
Private research universities	37.5%	50.0%	12.5%	0.0%
Public comprehensive colleges*	26.7%	73.3%	0.0%	0.0%
Private comprehensive colleges*	18.8%	78.1%	0.0%	3.1%
Private liberal-arts colleges	18.9%	77.4%	1.9%	1.9%
Public 2-year institutions	16.7%	75.0%	8.3%	0.0%
Private 2-year institutions	16.7%	83.3%	0.0%	0.0%
All institutions	19.8%	75.2%	4.2%	0.7%
Interest in contemporary public affairs				
Public research universities	23.1%	61.5%	15.4%	0.0%
Private research universities	0.0%	50.0%	50.0%	0.0%
Public comprehensive colleges*	12.5%	59.4%	25.0%	3.1%
Private comprehensive colleges*	15.6%	62.5%	18.8%	3.1%
Private liberal-arts colleges	5.9%	70.6%	19.6%	3.9%
Public 2-year institutions	8.3%	66.7%	13.9%	11.1%
Private 2-year institutions	0.0%	83.3%	16.7%	0.0%
All institutions	8.7%	67.0%	18.7%	5.7%
Political activism				
Public research universities	3.8%	57.7%	34.6%	3.8%
Private research universities	12.5%	12.5%	75.0%	0.0%
Public comprehensive colleges*	9.4%	43.7%	43.7%	3.1%
Private comprehensive colleges*	3.1%	62.5%	28.1%	6.3%
Private liberal-arts colleges	5.8%	69.2%	19.2%	5.8%
Public 2-year institutions	2.8%	61.1%	25.0%	11.1%
Private 2-year institutions	0.0%	100.0%	0.0%	0.0%
All institutions	4.5%	62.7%	26.2%	6.6%
Use of drugs				
Public research universities	3.8%	61.5%	30.9%	3.8%
Private research universities	12.5%	37.5%	37.5%	12.5%
Public comprehensive colleges*	0.0%	37.5%	37.5%	25.0%
Private comprehensive colleges*	0.0%	50.0%	37.5%	12.5%
Private liberal-arts colleges	0.0%	50.0%	36.5%	13.5%
Public 2-year institutions	2.8%	44.4%	22.2%	30.6%
Private 2-year institutions	33.3%	33.3%	33.3%	0.0%
All institutions	4.7%	44.8%	31.0%	19.4%
Use of alcohol				
Public research universities	32.0%	60.0%	8.0%	0.0%
Private research universities	37.5%	50.0%	12.5%	0.0%
Public comprehensive colleges*	15.6%	53.1%	3.1%	28.1%
Private comprehensive colleges*	31.3%	56.3%	3.1%	9.4%
Private liberal-arts colleges	26.9%	55.8%	1.9%	15.4%
Public 2-year institutions	13.9%	52.8%	0.0%	33.3%
Private 2-year institutions	33.3%	66.7%	0.0%	0.0%
All institutions	22.2%	55.4%	1.9%	20.5%

Trends in Instruction

	Increased	No change	Decreased	Don't know
Laboratory and studio instruction				
Public research universities	7.7%	88.5%	0.0%	3.8%
Private research universities	0.0%	100.0%	0.0%	0.0%
Public comprehensive colleges*	28.1%	65.6%	6.3%	0.0%
Private comprehensive colleges*	6.3%	90.6%	0.0%	3.1%
Private liberal-arts colleges	17.0%	83.0%	0.0%	0.0%
Public 2-year institutions	17.1%	82.9%	0.0%	0.0%
Private 2-year institutions	33.3%	66.7%	0.0%	0.0%
All institutions	18.2%	80.4%	0.9%	0.5%
Innovative teaching methods				
Public research universities	84.6%	15.4%	0.0%	0.0%
Private research universities	25.0%	75.0%	0.0%	0.0%
Public comprehensive colleges*	65.6%	31.3%	3.1%	0.0%
Private comprehensive colleges*	71.0%	29.0%	0.0%	0.0%
Private liberal-arts colleges	69.2%	30.8%	0.0%	0.0%
Public 2-year institutions	71.4%	20.0%	5.7%	2.9%
Private 2-year institutions	66.7%	33.3%	0.0%	0.0%
All institutions	68.8%	27.7%	2.5%	1.0%
Traditional independent study (e.g., research projects, senior theses)				
Public research universities	3.8%	92.3%	0.0%	3.8%
Private research universities	0.0%	100.0%	0.0%	0.0%
Public comprehensive colleges*	6.3%	87.5%	6.3%	0.0%
Private comprehensive colleges*	25.8%	71.0%	3.2%	0.0%
Private liberal-arts colleges	15.1%	81.1%	3.8%	0.0%
Public 2-year institutions	14.3%	74.3%	8.6%	2.9%
Private 2-year institutions	0.0%	100.0%	0.0%	0.0%
All institutions	12.1%	81.6%	5.1%	1.2%
Nontraditional independent study (e.g., credit by examination)				
Public research universities	23.1%	61.5%	11.5%	3.8%
Private research universities	0.0%	87.5%	12.5%	0.0%
Public comprehensive colleges*	21.9%	65.6%	12.5%	0.0%
Private comprehensive colleges*	23.3%	76.7%	0.0%	0.0%
Private liberal-arts colleges	24.5%	67.9%	5.7%	1.9%
Public 2-year institutions	37.1%	51.4%	8.6%	2.9%
Private 2-year institutions	33.3%	66.7%	0.0%	0.0%
All institutions	28.6%	62.7%	7.1%	1.7%
Experiential learning (e.g. work-study, clinical training)				
Public research universities	38.5%	50.0%	7.7%	3.8%
Private research universities	37.5%	62.5%	0.0%	0.0%
Public comprehensive colleges*	37.5%	59.4%	3.1%	0.0%
Private comprehensive colleges*	38.7%	58.1%	0.0%	3.2%
Private liberal-arts colleges	35.8%	60.4%	3.8%	0.0%
Public 2-year institutions	40.0%	48.6%	8.6%	2.9%
Private 2-year institutions	33.3%	66.7%	0.0%	0.0%
All institutions	37.8%	56.0%	4.8%	1.5%
Average class size				
Public research universities	53.8%	42.3%	3.8%	—
Private research universities	25.0%	75.0%	0.0%	—

Continued on Page 10

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* Institutions with more than 1,500 students, a liberal-arts program, and at least one professional program

Public Radio

Continued from Page 1

of directors to cope with financial problems that first became public in March when network officials reported that the network expected a shortfall of $2.8-million in this year's $26-million budget.

By the time of the annual Public Radio Conference in Minneapolis in April, estimates of the deficit had risen to $5.8-million. Last week, several station managers said that they had heard rumors that an audit of the network's books, to be made public this week, could show a deficit for fiscal 1983 of more than $10-million.

The revelation of the financial problems triggered a series of drastic steps at N.P.R. Frank Mankiewicz, president of the network since 1977, announced that he was resigning. The board of directors chose Mr. Bornstein, acting vice-chancellor for extension and acting director of the telecommunications division at the University of Wisconsin, to serve as chief operating officer for six months.

Shortly after his appointment in April, Mr. Bornstein announced that 84 N.P.R. staff members were being laid off and that the board had approved a budget for fiscal 1984 of $17.65-million, 35 per cent below this year's budget. The network had already eliminated 47 jobs in March.

The sharpest cuts came in N.P.R.'s performance department, which produces arts and cultural programs. That division's budget was slashed 79 per cent from an original total of $1.8-million this year to $400,000 for fiscal 1984.

In the process, the network eliminated support for two programs—"The Sunday Show" and "Jazz Alive." However, most observers expect "Jazz Alive" to be continued by a consortium of public-radio stations.

The smallest cuts were in the network's award-winning news and information department, which produces its two most popular programs—"All Things Considered" and "Morning Edition." The department's budget was cut by 15 per cent—from $5.3-million this year to $4.5-million in fiscal 1984.

Last month, N.P.R. also received a $500,000 short-term loan from the Corporation for Public Broadcasting simply to meet its end-of-the-month payroll.

Mr. Bornstein said last week that N.P.R. had ordered restrictions on travel and capital purchasing. "Cash flow will be a consistent problem for us for the remainder of this fiscal year," he added.

Assessments of the financial crisis at the network attribute the problems at least in part to poor management and to what one observer called the "undue optimism" of Mr. Mankiewicz and other officials about plans, developed in 1981, to make N.P.R. independent of government financing.

Faced with the Reagan Administration's desire to reduce federal support for public broadcasting, Mr. Mankiewicz decided to pursue an aggressive strategy of raising private money and starting profit-making business ventures. His goal was to make the network "independent" by 1987.

However, neither the fund-raising efforts nor the private ventures were as successful as quickly as N.P.R. officials had expected. With N.P.R.'s federal contribution declining—from $17.4-million in fiscal 1982 to $12.6-million this year—and with the outside ventures generating less income than anticipated, the network was left with its startling deficits.

In the meantime, several station managers said they were concerned about the impact of the network's financial crisis on their own stations.

"The stations are concerned about preserving the quality, integrity, and even the length of 'All Things Considered' and 'Morning Edition,' " said Gary Shivers, manager of WUNC at the University of North Carolina.

However, Mr. Shivers added, "In most cases, the stations are relatively healthy financially. What concerns us is that the public-radio system continue to provide the broad services that have made it distinctive."

CHRONICLE SURVEY—Continued

Trends in Instruction *Continued from Page 8*

	Increased	No change	Decreased	Don't know
Average class size—Continued				
Public comprehensive colleges*	40.6%	56.2%	3.1%	—
Private comprehensive colleges*	12.9%	64.5%	22.6%	—
Private liberal-arts colleges	15.1%	69.8%	15.1%	—
Public 2-year institutions	48.6%	51.4%	0.0%	—
Private 2-year institutions	16.7%	66.7%	16.7%	—
All institutions	32.8%	59.4%	7.8%	—
Rigor of academic standards				
Public research universities	53.8%	46.2%	0.0%	—
Private research universities	25.0%	75.0%	0.0%	—
Public comprehensive colleges*	43.7%	56.2%	0.0%	—
Private comprehensive colleges*	35.5%	54.8%	6.5%	—
Private liberal-arts colleges	26.4%	73.6%	0.0%	—
Public 2-year institutions	40.0%	57.1%	2.9%	—
Private 2-year institutions	33.3%	66.7%	0.0%	—
All institutions	36.5%	61.6%	1.6%	—
Overall quality of learning environment				
Public research universities	46.2%	46.2%	7.7%	—
Private research universities	25.0%	75.0%	0.0%	—
Public comprehensive colleges*	50.0%	50.0%	0.0%	—
Private comprehensive colleges*	51.6%	45.2%	3.2%	—
Private liberal-arts colleges	41.5%	58.5%	0.0%	—
Public 2-year institutions	52.9%	47.1%	0.0%	—
Private 2-year institutions	66.7%	33.3%	0.0%	—
All institutions	49.8%	49.5%	0.7%	—

Student Services

	Increased	No change	Decreased	Don't know
Career counseling				
Availability of services				
Public research universities	19.2%	69.2%	7.7%	—
Private research universities	25.0%	62.5%	12.5%	—
Public comprehensive colleges*	34.4%	59.4%	6.3%	—
Private comprehensive colleges*	62.5%	37.5%	0.0%	—
Private liberal-arts colleges	55.8%	44.2%	0.0%	—
Public 2-year institutions	37.1%	60.0%	2.9%	—
Private 2-year institutions	33.3%	50.0%	16.7%	—
All institutions	41.8%	53.7%	4.3%	—
Frequency of use				
Public research universities	61.5%	34.6%	0.0%	3.8%
Private research universities	75.0%	12.5%	12.5%	0.0%
Public comprehensive colleges*	56.2%	31.3%	0.0%	12.5%
Private comprehensive colleges*	75.0%	21.9%	0.0%	3.1%
Private liberal-arts colleges	76.9%	21.2%	0.0%	1.9%
Public 2-year institutions	40.0%	57.1%	2.9%	0.0%
Private 2-year institutions	33.3%	50.0%	16.7%	0.0%
All institutions	55.6%	38.7%	3.0%	2.7%
Quality				
Public research universities	26.9%	61.5%	7.7%	3.8%
Private research universities	37.5%	50.0%	12.5%	0.0%
Public comprehensive colleges*	37.5%	46.9%	9.4%	6.3%
Private comprehensive colleges*	65.6%	31.3%	0.0%	3.1%
Private liberal-arts colleges	59.6%	40.4%	0.0%	0.0%
Public 2-year institutions	28.6%	71.4%	0.0%	0.0%
Private 2-year institutions	50.0%	33.3%	16.7%	0.0%
All institutions	42.8%	52.2%	3.7%	1.4%
Career placement				
Availability of services				
Public research universities	19.2%	73.1%	3.8%	3.8%
Private research universities	0.0%	100.0%	0.0%	0.0%
Public comprehensive colleges*	28.1%	65.6%	6.3%	0.0%
Private comprehensive colleges*	59.4%	40.6%	0.0%	0.0%
Private liberal-arts colleges	51.9%	48.1%	0.0%	0.0%
Public 2-year institutions	37.1%	54.3%	5.7%	2.9%
Private 2-year institutions	0.0%	80.0%	20.0%	0.0%
All institutions	36.4%	57.6%	4.8%	1.2%
Frequency of use				
Public research universities	57.7%	38.5%	0.0%	3.8%
Private research universities	50.0%	50.0%	0.0%	0.0%
Public comprehensive colleges*	53.1%	37.5%	0.0%	9.4%
Private comprehensive colleges*	68.8%	21.9%	6.3%	3.1%
Private liberal-arts colleges	61.5%	36.5%	0.0%	1.9%
Public 2-year institutions	48.6%	42.9%	5.7%	2.9%
Private 2-year institutions	0.0%	80.0%	20.0%	0.0%
All institutions	50.7%	41.6%	4.3%	3.3%
Quality				
Public research universities	30.8%	57.7%	7.7%	3.8%
Private research universities	37.5%	62.5%	0.0%	0.0%
Public comprehensive colleges*	31.3%	53.1%	9.4%	6.3%
Private comprehensive colleges*	65.6%	31.3%	0.0%	3.1%
Private liberal-arts colleges	51.0%	49.0%	0.0%	0.0%
Public 2-year institutions	45.7%	45.7%	5.7%	2.9%
Private 2-year institutions	20.0%	60.0%	20.0%	0.0%
All institutions	43.7%	48.5%	5.5%	2.4%
Nonacademic programs for women				
Availability of services				
Public research universities	38.5%	53.8%	3.6%	3.8%
Private research universities	12.5%	75.0%	0.0%	12.5%
Public comprehensive colleges*	37.5%	56.2%	3.1%	3.1%
Private comprehensive colleges*	34.4%	65.6%	0.0%	0.0%
Private liberal-arts colleges	32.0%	66.0%	0.0%	2.0%

* Institutions with more than 1,500 students, a liberal-arts program, and at least one professional program.

Student Services *Continued*

	Increased	No change	Decreased	Don't know
Nonacademic programs for women				
Availability of services				
Public 2-year institutions	28.6%	60.0%	8.6%	2.9%
Private 2-year institutions	16.7%	83.3%	0.0%	0.0%
All institutions	30.0%	63.8%	3.7%	2.5%
Frequency of use				
Public research universities	42.3%	50.0%	0.0%	7.7%
Private research universities	12.5%	62.5%	12.5%	12.5%
Public comprehensive colleges*	28.1%	53.1%	3.1%	15.6%
Private comprehensive colleges*	28.1%	65.6%	3.1%	3.1%
Private liberal-arts colleges	26.5%	67.3%	0.0%	6.1%
Public 2-year institutions	37.1%	48.6%	11.4%	2.9%
Private 2-year institutions	16.7%	83.3%	0.0%	0.0%
All institutions	30.1%	58.9%	5.3%	5.7%
Quality				
Public research universities	34.6%	57.7%	0.0%	7.7%
Private research universities	25.0%	62.5%	0.0%	12.5%
Public comprehensive colleges*	28.1%	53.1%	3.1%	15.6%
Private comprehensive colleges*	31.3%	65.6%	0.0%	3.1%
Private liberal-arts colleges	24.5%	71.4%	0.0%	4.1%
Public 2-year institutions	28.6%	57.1%	11.4%	2.9%
Private 2-year institutions	16.7%	83.3%	0.0%	0.0%
All institutions	26.9%	63.3%	4.6%	5.3%
Nonacademic programs for minorities				
Public research universities	26.1%	69.6%	0.0%	4.3%
Private research universities	14.3%	85.7%	0.0%	0.0%
Public comprehensive colleges*	12.9%	80.6%	3.2%	3.2%
Private comprehensive colleges*	20.0%	76.7%	3.3%	0.0%
Private liberal-arts colleges	19.6%	80.4%	0.0%	0.0%
Public 2-year institutions	10.0%	70.0%	10.0%	10.0%
Private 2-year institutions	0.0%	100.0%	0.0%	0.0%
All institutions	13.4%	78.3%	4.2%	4.1%
Psychological counseling				
Availability of services				
Public research universities	15.4%	73.1%	7.7%	3.8%
Private research universities	37.5%	50.0%	12.5%	0.0%
Public comprehensive colleges*	15.6%	78.1%	3.1%	3.1%
Private comprehensive colleges*	34.4%	62.5%	0.0%	3.1%
Private liberal-arts colleges	23.1%	71.2%	3.8%	1.9%
Public 2-year institutions	11.4%	80.0%	0.0%	8.6%
Private 2-year institutions	16.7%	83.3%	0.0%	0.0%
All institutions	18.4%	75.1%	2.1%	4.4%
Frequency of use				
Public research universities	38.5%	50.0%	3.8%	7.7%
Private research universities	62.5%	25.0%	12.5%	0.0%
Public comprehensive colleges*	28.1%	65.6%	0.0%	6.3%
Private comprehensive colleges*	62.5%	34.4%	0.0%	3.1%
Private liberal-arts colleges	23.1%	67.3%	3.8%	5.8%
Public 2-year institutions	17.1%	71.4%	0.0%	11.4%
Private 2-year institutions	0.0%	100.0%	0.0%	0.0%
All institutions	25.1%	66.4%	1.5%	7.0%
Quality				
Public research universities	30.8%	61.5%	3.8%	3.8%
Private research universities	25.0%	62.5%	12.5%	0.0%
Public comprehensive colleges*	12.5%	78.1%	0.0%	9.4%
Private comprehensive colleges*	37.5%	56.3%	3.1%	3.1%
Private liberal-arts colleges	21.2%	76.9%	0.0%	1.9%
Public 2-year institutions	14.3%	74.3%	2.9%	8.6%
Private 2-year institutions	50.0%	50.0%	0.0%	0.0%
All institutions	22.4%	70.4%	1.9%	5.3%
Health services				
Availability of services				
Public research universities	15.4%	69.2%	11.5%	3.8%
Private research universities	12.5%	87.5%	0.0%	0.0%
Public comprehensive colleges*	12.5%	81.2%	3.1%	3.1%
Private comprehensive colleges*	18.8%	78.1%	3.1%	0.0%
Private liberal-arts colleges	15.4%	84.6%	0.0%	0.0%
Public 2-year institutions	6.5%	87.1%	0.0%	6.5%
Private 2-year institutions	0.0%	100.0%	0.0%	0.0%
All institutions	10.7%	85.2%	1.3%	2.9%
Frequency of use				
Public research universities	30.8%	61.5%	3.8%	3.8%
Private research universities	12.5%	87.5%	0.0%	0.0%
Public comprehensive colleges*	21.9%	59.4%	3.1%	15.6%
Private comprehensive colleges*	21.9%	68.8%	6.3%	3.1%
Private liberal-arts colleges	17.6%	78.4%	2.0%	2.0%
Public 2-year institutions	9.7%	80.6%	0.0%	9.7%
Private 2-year institutions	0.0%	100.0%	0.0%	0.0%
All institutions	14.8%	77.0%	1.7%	6.5%
Quality				
Public research universities	26.9%	65.4%	0.0%	7.7%
Private research universities	12.5%	87.5%	0.0%	0.0%
Public comprehensive colleges*	25.0%	56.2%	6.3%	12.5%
Private comprehensive colleges*	18.8%	78.1%	3.1%	0.0%
Private liberal-arts colleges	13.7%	86.3%	0.0%	0.0%
Public 2-year institutions	6.5%	83.9%	0.0%	9.7%
Private 2-year institutions	0.0%	100.0%	0.0%	0.0%
All institutions	12.7%	80.6%	1.2%	5.5%

Note: Survey data are based on responses from a stratified random sample of 150 public and 150 private institutions. The approximate response rate was 75 per cent. Technical inquiries about the survey design and sampling techniques should be addressed to John Minter Associates, P.O. Box 107, Boulder, Colo. 80306.

SOURCE: SURVEY FOR THE CHRONICLE BY JOHN MINTER ASSOCIATES

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'In' Box

When is the best time for teachers to prepare final examinations?

The director and former director of Kansas State University's Office of Educational Improvement give the same advice that teachers often give students: Don't wait until the last week of the semester.

For teachers, that means writing test items after each class session, say Victoria L. Clegg and her predecessor, Richard E. Owens. The exams will then more fairly represent material as it was actually covered, they say. Other suggestions can be found in a pamphlet by Ms. Clegg and Mr. Owen, *Tips for Writing Tests* (Kansas State University Graduate Services and Publications, 1120 Bertrand Street, Manhattan, Kan. 66502; 17 pages; $1.95).

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Teachers have a tougher job than doctors have, says an education professor at Stanford University who has studied both of their professions.

Both have to make hard decisions, often under great pressure, but teachers have to confront "a more subtle and insidious stress," Lee S. Shulman told a recent alumni conference. While doctors usually see one patient at a time, he said, teachers spend most of their time dealing with large groups.

•

Going to Brussels? The information service of the North Atlantic Treaty Organization, which has its headquarters in that city, stands ready to arrange "briefing programs" for American college professors, administrators, and students.

According to Nyoka White, a U.S. liaison officer at the information service, such arrangements are already being made for American visitors about four times a month, but NATO would like to expand them. She says the programs, which take about 4½ hours, typically begin at 9 a.m. with a background film on the organization, followed by discussions on East-West issues with NATO members from various countries. Special-interest sessions can be added.

Because August and December are traditional European vacation periods, no briefings will be scheduled during those months. Other details may be obtained from the NATO Information Service, 1110 Brussels, Belgium.

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A pension expert who recently criticized the performance and governance of the Teachers Insurance Annuity Association and the College Retirement Equities Fund (see *The Chronicle*, May 11) has been named to the committee that nominates policyholder representatives to the companies' board of trustees.

Roy A. Schotland, a law professor at the Georgetown University Law Center, says he does not know how his selection came about, but that he has agreed to serve on the committee. This week in Washington he is scheduled to debate Thomas C. Edwards, T.I.A.A.-C.R.E.F. chairman, at a symposium sponsored by the National Education Association.

Personal & Professional

39 Pct. of College Administrators Changed Jobs in 2-Year Span

By **ROBERT L. JACOBSON**

WASHINGTON

Some of the campus officials who work most closely with college and university presidents have the highest turnover rates among administrators in higher education, according to a survey covering nearly 44,000 positions between the fall of 1980 and the summer of 1982.

More than half of the presidential assistants, executive vice-presidents, and chief public-relations officers changed jobs in that two-year period, the survey results show. The presidents themselves, meanwhile, had one of the lowest turnover rates—averaging less than 13 per cent a year.

(Any official whose position changed—whether he left his college or took another job within it—was counted in the survey. The results thus do not distinguish between administrators who were replaced outright and those who were promoted.)

The survey, of some 3,250 colleges and universities, was made by Higher Education Publications, Inc., in connection with its compilation of a national directory of colleges and universities. Among the other highlights:

► The combined turnover rate for administrators in 55 job categories was 39.3 per cent for the two years covered by the survey.

► Turnover was several percentage points higher at private institutions than at public institutions. Overall, the difference was more than 5 points (41.9 per cent versus 36.7 per cent), but even for colleges of comparable size the rates were almost always higher at private institutions.

► As a rule, the smaller the institution, the higher the turnover rate. For example, administrators at private colleges with up to 1,000 students had a two-year rate of 45.4 per cent, while those at public colleges with more than 20,000 students had a rate of 34.5 per cent.

► Chief executives tended to change jobs more often if they headed campuses within a university system and thus reported to a systemwide president or chancellor. For those officials in charge of systems or separate institutions not belonging to systems, the turnover rate was 25.9 per cent for the two years. In contrast, those reporting to systemwide chiefs had a two-year rate of 36.2 per cent.

► Other administrators with comparatively low turnover rates included deans of pharmacy (19.4 per cent), head librarians (26.3 per cent), deans of veterinary medicine (30.3 per cent), deans of home economics (30.4 per cent), deans of dentistry (31.1 per cent), and registrars (31.5 per cent).

► The highest turnover rates were reported for assistants to presidents (55.9 per cent), directors of information systems (54.4 per cent), executive vice-presidents (51.1 per cent), deans of natural resources (50.4 per cent), chief development officers (50.2 per cent), chief public-relations officers (50.1 per cent), and deans of theology (50 per cent).

► For several positions, the two-year turnover rate was more than 15 points higher in private institutions than in public institutions. That was true for chief executives of campuses within university systems, admissions directors, directors of information systems, and deans or directors of agriculture, continuing education, and extension.

A comparison of the survey's results with turnover statistics previously reported by the National Center for Education Statistics for 1978-79 and 1979-80 pointed to a marked increase in job-changing since

Continued on Following Page

Administrative Turnover, 1980-82, by College Size

Public Institutions

Enrollment	Positions	No. Leaving	Rate
Up to 1,000	1,326	521	39.3%
1,001-2,500	4,273	1,625	38.0%
2,501-5,000	4,612	1,746	37.9%
5,001-10,000	5,112	1,849	36.2%
10,001-20,000	4,379	1,552	35.4%
Over 20,000	2,603	899	34.5%
Totals.......	**22,305**	**8,192**	**36.7%**

Private Institutions

Enrollment	Positions	No. Leaving	Rate
Up to 1,000	10,189	4,629	45.4%
1,001-2,500	6,132	2,481	40.5%
2,501-5,000	2,395	861	35.9%
5,001-10,000	1,673	622	37.2%
10,001-20,000	804	300	37.3%
Over 20,000	212	78	36.8%
Totals.......	**21,405**	**8,971**	**41.9%**

All Institutions

Enrollment	Positions	No. Leaving	Rate
Up to 1,000	11,515	5,150	44.7%
1,001-2,500	10,405	4,106	39.5%
2,501-5,000	7,007	2,607	37.2%
5,001-10,000	6,785	2,471	36.4%
10,001-20,000	5,183	1,852	35.7%
Over 20,000	2,815	977	34.7%
Totals.......	**43,710**	**17,183**	**39.3%**

SOURCE: HIGHER EDUCATION PUBLICATIONS, INC.

Computer Grants May Depend on Whom You Know

By **JUDITH AXLER TURNER**

Getting a grant or a gift from a computer company may well depend on whom you know, what you know, and how well you understand the company's needs.

The experience of John R. Kronenburger, an instructor in electrical engineering at Northern Illinois University, is a case in point. Last month, relying on someone he knew at Intel Corporation, he was able to buy more than $100,000 worth of computer equipment for the university for only $13,000.

"One of the sales reps from Intel was trying to sell me something," Mr. Kronenburger recalls. "I said we might be willing to set up labs or courses around Intel equipment. Intel was interested. They are very informal."

The sales person then put Mr. Kronenburger in touch with Jerry L. Eschweiler, a technical-support engineer in Intel's office in Rolling Meadows, Ill., and the two engineers "did a lot of talking over the phone."

Ultimately it was Mr. Eschweiler who put the proposal together, and the company accepted it.

"Intel wants to keep universities up to date in current technologies," Mr. Eschweiler explains. "I work with colleges in this area to set up a proposal, and the company's college-relations department decides how much can be donated."

Intel's informality is intentional, says Emil J. Sarpa, its corporate manager for academic affairs.

"I wanted this to be non-bureaucratic," he says of its approach to colleges and uni-

Continued on Following Page

GEORGE TARBAY, NORTHERN ILLINOIS UNIVERSITY

A personal contact and "a lot of talking over the phone" helped John R. Kronenburger buy computers at a discount.

Job Changes *Continued from Preceding Page*

then. The rate was up for almost all administrative positions, and substantially so—at least 10 points over two years—for about half of them.

Among those with the largest increases were executive vice-presidents (up 31.1 per cent), chief planning officers (up 27 4 per cent), assistants to presidents (up 25.8 per cent), and deans or directors in several academic fields—natural resources (up 26.4 per cent), technology (up 24.9 per cent), and architecture (up 22.7 per cent).

Turnover declined for only four positions—chief executives of campuses within a system, chief academic officers, and deans of home economics and pharmacy—and by less than two points in each case.

Federal Directory Ended

Higher Education Publications, the company conducting the latest survey, was created last fall after a federal budget cut led the Department of Education to discontinue its annual directory of colleges and universities. The company's president, Frederick F. Hafner, said it would repeat its survey and publication of its directory next year.

This year's edition, which does not include the data on administrative turnover, lists institutions alphabetically by state and gives their addresses, telephone numbers, tuition, accreditation, and enrollment, among other details. It also gives the names of top administrators of each institution, and indexes those separately.

Mr. Hafner said about 6,000 copies of the 475-page directory had been sold since February. The price is $25, or $23.75 prepaid, with postage and handling charges included. Discounts for bulk orders are available.

In addition, selected data from the survey may be ordered, and the company is selling mailing labels at $55 per 1,000 for specified groups of administrators in its data bank.

For further information, write to Higher Education Publications, 1302 Eighteenth Street, N.W., Suite 401, Washington 20036; (202) 296-9106.

FACT–FILE

Turnover of Administrators, 1980-82, by Position and Type of Institution

	Public institutions			Private institutions			All institutions		
	Positions	No. Leaving	Rate	Positions	No. Leaving	Rate	Positions	No. Leaving	Rate
Chief executive officer	897	241	26.9%	1,802	458	25.4%	2,699	699	25.9%
Chief executive within a system	669	217	32.4%	149	79	53.0%	818	296	36.2%
Executive vice-president	308	142	46.1%	476	259	54.4%	784	401	51.1%
Assistant to president	536	294	54.9%	518	295	56.9%	1,054	589	55.9%
Chief academic officer	1,335	536	40.1%	1,609	626	38.9%	2,944	1,162	39.5%
Registrar	1,175	350	29.8%	1,538	505	32.8%	2,713	855	31.5%
Director, admissions	826	268	32.4%	1,268	609	48.0%	2,094	877	41.9%
Head librarian	1,314	335	25.5%	1,513	408	27.0%	2,827	743	26.3%
Director, institutional research	496	199	40.1%	297	162	54.5%	793	361	45.5%
Chief business officer	1,358	423	31.1%	1,621	608	37.5%	2,979	1,031	34.6%
Director, information systems	107	51	47.7%	62	41	66.1%	169	92	54.4%
Director, computer center	705	249	35.3%	497	218	43.9%	1,202	467	38.9%
Director, personnel services	600	203	33.8%	390	168	43.1%	990	371	37.5%
Director, security	184	81	44.0%	123	66	53.7%	307	147	47.9%
Contract administrator	264	101	38.3%	169	78	46.2%	433	179	41.3%
Chief public-relations officer	539	254	47.1%	642	338	52.6%	1,181	592	50.1%
Director, information office	433	172	39.7%	348	181	52.0%	781	353	45.2%
Director, alumni relations	299	126	42.1%	651	330	50.7%	950	456	48.0%
Chief development officer	489	241	49.3%	1,046	529	50.6%	1,535	770	50.2%
Chief student-life officer	1,277	405	31.7%	1,248	524	42.0%	2,525	929	36.8%
Dean of men	164	69	42.1%	234	108	46.2%	398	177	44.5%
Dean of women	111	39	35.1%	224	88	39.3%	335	127	37.9%
Director, student placement	579	193	33.3%	645	304	47.1%	1,224	497	40.6%
Director, student financial aid	948	299	31.5%	1,075	469	43.6%	2,023	768	38.0%
Director, student counseling	580	226	39.0%	399	180	45.1%	979	406	41.5%
Chief planning officer	345	166	48.1%	259	120	46.3%	604	286	47.4%
Dean or director of:									
Agriculture	113	34	30.1%	11	7	63.6%	124	41	33.1%
Architecture	59	25	42.4%	26	11	42.3%	85	36	42.4%
Arts and sciences	632	257	40.7%	279	119	42.7%	911	376	41.3%
Business	521	193	37.0%	230	103	44.8%	751	296	39.4%
Continuing education	772	309	40.0%	348	195	56.0%	1,120	504	45.0%
Dentistry	50	18	36.0%	24	5	20.8%	74	23	31.1%
Education	430	157	36.5%	173	83	48.0%	603	240	39.8%
Engineering	210	75	35.7%	95	42	44.2%	305	117	38.4%
Evening division	190	87	45.8%	102	47	46.1%	292	134	45.9%
Extension	207	90	43.5%	68	41	60.3%	275	131	47.6%
Fine arts	236	93	39.4%	80	40	50.0%	316	133	42.1%
Graduate programs	345	121	35.1%	296	117	39.5%	641	238	37.1%
Home economics	81	26	32.1%	11	2	18.2%	92	28	30.4%
Journalism	48	18	37.5%	17	6	35.3%	65	24	36.9%
Law	83	37	44.6%	105	45	42.9%	188	82	43.6%
Library science	48	19	39.6%	14	8	57.1%	62	27	43.5%
Medicine	109	38	34.9%	65	35	53.8%	174	73	42.0%
Music	47	19	40.4%	66	33	50.0%	113	52	46.0%
Natural resources	101	47	46.5%	24	16	66.7%	125	63	50.4%
Nursing	298	131	44.0%	114	57	50.0%	412	188	45.6%
Pharmacy	52	11	21.2%	15	2	13.3%	67	13	19.4%
Physical education	138	62	44.9%	48	22	45.8%	186	84	45.2%
Public health	93	44	47.3%	21	9	42.9%	114	53	46.5%
Social work	165	75	45.5%	64	23	35.9%	229	98	42.8%
Special session	102	39	38.2%	113	55	48.7%	215	94	43.7%
Technology	249	114	45.8%	49	23	46.9%	298	137	46.0%
Theology	2	2	100%	102	50	49.0%	104	52	50.0%
Veterinary medicine	28	8	28.6%	5	2	40.0%	33	10	30.3%
Vocational education	358	163	45.5%	37	22	59.5%	395	185	46.8%
Totals	**22,305**	**8,192**	**36.7%**	**21,405**	**8,971**	**41.9%**	**43,710**	**17,163**	**39.3%**

SOURCE: HIGHER EDUCATION PUBLICATIONS, INC.

Computers *Continued from Preceding Page*

versities. "There are only three questions I want answered in any proposal: What do they want and when? What do they want to do with it? and Where do they plan to go from here?"

Mr. Kronenburger, who in addition to his academic job does telecommunications work for private companies, knew just what he wanted at Northern Illinois: a sophisticated digital-systems laboratory to replace equipment that students had hooked up so they could write software in the ones and zeros of the binary system.

He also wanted it right away, and he intended to use it to teach engineering and computer-science students how to use sophisticated equipment and write software in high-level computer languages.

His plans were an excellent match for Intel's own objectives, and the equipment is expected to be in place by the fall.

Informality the Norm

Intel's informal structure for grants and gifts seems to be the norm, rather than the exception, in the computer field. Of several computer companies contacted by *The Chronicle*, only one—Atari—evaluates requests for funds in a formal way. The others depend far more on their relationships with particular institutions or people.

Whether that is good news for colleges and scholars looking for money and equipment depends on where you sit. To some extent, the policies give an edge to faculty members and administrators who work with computer-company personnel on a regular basis, whether on the campus or in consulting jobs.

"Lots of people are getting donations from the industries they work with," says a university administrator who prefers that his name not be used. "They drive some development people up the wall. Every time the development people go to a business, someone has been there before them."

In many cases it makes no difference who applies for a gift as long as the right people at the computer company are involved.

Hewlett-Packard, which has one of the most active programs of gifts and grants to colleges, is as likely to respond to a college instructor's request as it is to one from the campus fund-raising office. Either way, the most important component is involvement of the company's local representatives—technicians, sales people, or recruiters.

"If we make a grant, we want to know that the field-sales network will be supportive," says Barbara D. Williams, equipment-gift coordinator at Hewlett-Packard's headquarters in Palo Alto, Cal. A proposal is less likely to succeed if it "comes in cold" and the authors "haven't bothered to develop a network within the company," she adds.

A recently announced gift of nearly 2,000 computers—and the service and personnel to maintain them—from Digital Equipment Corporation to the Massachusetts Institute of Technology was based on close ties between the company and the university (see *The Chronicle*, June 8). The gifts are part of a joint contribution that includes 1,000 personal computers from International Business Machines corporation.

Peter D. Connell, Digital's manager of corporate information, says it has had "a longstanding relationship" with M.I.T.

"We have been supporting the university since the company was founded 25 years ago," he says. Kenneth H. Olsen, the president of Digital, is an M.I.T. graduate.

"Our computer scientists have had close and regular interactions with Digital," adds Eric Johnson, assistant dean for resource development at M.I.T. and assistant dean of its engineering school. "It is not like we were entering into discussions with someone we didn't know."

Company Issues

What you know also makes a difference. Applicants need insight into what a computer company is looking for.

"Every company has an issue it cares about," says David Beaver, assistant to the chairman of the board at Apple Computer, Inc. Apple has "a strong bias" to supporting elementary and secondary education, he says, while Hewlett-Packard "needs engineers they can afford," and so finds it worthwhile to provide help to higher education.

Hewlett-Packard's Ms. Williams does not deny that there is a benefit to the company in donating equipment to colleges and universities.

"Our thrust is getting equipment out into the hands of the students," she says, in part because they may later become customers in their own right.

"There is a fringe benefit for recruiting or in having students design around our equipment when they get jobs in the industry," says another industry official.

The companies "want to get students acquainted with their equipment," Mr. Kronenburger observes. Later, the students may end up working for them, he says—or, if they work for other companies, they still may recommend equipment they used in college.

Carnegie-Mellon University, which announced a joint effort with I.B.M. last year to develop a new system for university computing, also appreciates the value of accommodating the computer industry's needs.

Higher Education's Needs

In discussing the project with I.B.M.—which is providing $20-million worth of equipment, personnel, and grants—the university proposed that its engineering department work with the company to test and modify I.B.M. equipment and software for the needs of higher education.

The resulting product may prove to be commercially marketable, says Douglas E. Van Houweling, Carnegie-Mellon's vice-provost for computing and planning. "We believe that an arrangement in which I.B.M. owns the intellectual property is more attractive to I.B.M."

Such an arrangement, attractive though it may be to I.B.M., is not typical of that company's grants pattern, however. A spokesman says its large program of grants rarely includes equipment.

Apple Computer, meanwhile, sometimes uses grants of equipment to help its sales. Recently Brown University announced that Apple was giving it 50 of its Lisa computers as part of a three-year program of "creating and testing new ways to use computers for teaching and scholarship." As part of that project, says a university official, Brown agreed to buy at least $2-million worth of other Apple equipment—at "significant discounts from retail."

An official at Apple says the arrangement was "worked out through the marketing department."

Computer corporations are not the only ones looking out for their own interests, however. Says a university administrator:

"People look at the grants and the outside support you obtain when it comes time to make decisions about promotions. And it looks good on a résumé."

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News Summary

Articles on inside pages

National Public Radio suffered a net loss of $4.5-million in the first seven months of this fiscal year and may not survive, according to a recent audit. Story on Page 3.

Brown University's "new curriculum"—not so new anymore, but still its biggest drawing card for new students—is under review by the institution. Story on Page 4.

A company that coaches students preparing for the Medical College Admission Test is being sued because of "irregularities" in the students' scores. Story on Page 7.

The Senate has rejected a proposal to ban temporarily the taxing of low-rent faculty housing. Story on Page 9.

Education has become an issue in the 1984 Presidential campaign, and higher-education advocates are pleased. Story on Page 9.

Following a self-imposed suspension of its basketball program, the University of San Francisco will resume its participation in the sport in 1985-86. Story on Page 15.

Academic authors receive surprisingly little information about the financial terms of their publishing contracts. Story on Page 19.

The full texts of most of the American Chemical Society's scientific journals are now available electronically. Story on Page 23.

France's National Assembly has approved sweeping changes in the country's higher-education system, but did not accept all the government's reforms. Story on Page 17.

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'Discrete' Math Challenges Calculus as Computers Alter Students' Needs

By JUDITH AXLER TURNER

The supremacy of calculus in the freshman and sophomore mathematics curriculum is being challenged, in part because the computer has changed the mathematical needs of students in so many fields.

The most recent evidence of that trend is an award last week by the Alfred P. Sloan Foundation of $40,000 grants to each of six college and university mathematics departments to initiate experimental courses that balance classical calculus with instruction in what is called discrete mathematics.

Traditionally, calculus has been taught in the mathematics curriculum taken by most freshmen and sophomores. Discrete mathematics has not been taught until the junior and senior years.

Calculus is part of continuous mathematics, which deals with such things as the motion of airplanes, cars, or particles in physics. Calculus was invented to solve such continuous-motion problems. Discrete mathematics, which deals with individual values and quantities, seems to many to be easier to understand. Counting is part of discrete mathematics. The computer, too, depends on discrete mathematics because it manipulates individual symbols and quantities.

The Sloan grants were made to the mathematics departments at Colby College (Maine), the University of Delaware, the University of Denver, Florida State University, Montclair State College, and St. Olaf College.

The grants will allow faculty members and administrators "thinking time" to plan the courses and to teach the first versions of them, said Stephen B. Maurer, a program officer at the foundation who is on leave from Swarthmore College, where he is an associate professor of mathematics.

Important for Computers

Discrete mathematics is particularly important to computer-science students, although many people argue that the proliferation of computers has increased the importance of discrete mathematics in all science and engineering studies—and even in such fields as economics and psychology.

"Mathematics is influenced by problems that need solving in other areas," says Anthony Ralston, a professor of

Continued on Page 6, Column 1

Civil-Rights Panel Urges Reagan Not to Forsake Anti-Bias Policy

5 of 6 commissioners ask broad interpretation of law

By CHERYL M. FIELDS

WASHINGTON

The Reagan Administration must "halt efforts to reduce federal civil-rights enforcement in education," the U.S. Commission on Civil Rights warned last week, or else forsake "fundamental national policy developed over more than a quarter century."

The commission urged the Administration to give broad interpretation to the major law barring sex bias in education when it files a brief with the Supreme Court next month in a challenge to the law brought by Grove City College.

In a 10-page statement supported by five of its six members, the commission urged the Justice Department to embrace lower-court rulings and existing federal regulations that adopt an expansive reading of Title IX of the Education Amendments of 1972, which bars sex bias in federally assisted education programs or activities.

The department must file a brief early in July responding to Grove City's assertion that the Education Department has no right to enforce Title IX at the Pennsylvania institution.

Clarence M. Pendleton, Jr., the conservative black Republican who chairs the commission, did not support the statement. All five of the other commissioners—three of whom President Reagan is trying to replace—did, however.

Grove City, which already has filed its brief with the Court, says the Justice Department has no authority to require it to sign a form promising to comply with Title IX—or otherwise to enforce the law on its campus—because it accepts no direct federal aid.

Federal district and appeals courts, however, have said that the law applies to

Continued on Page 12, Column 1

Faculty Raises Top Inflation, Average 6.4 Pct.

Purchasing-power rise feared to be 1-year 'blip'

By BEVERLY T. WATKINS

WASHINGTON

The purchasing power of college and university professors increased this year for the first time in almost a decade, according to the annual report on faculty salaries of the American Association of University Professors.

The average faculty salary, after adjusting for inflation, rose 2 per cent during 1982-83, said W. Lee Hansen, a professor of economics at the University of Wisconsin at Madison and chairman of the A.A.U.P.'s salary committee.

While the increase is "a much-welcomed development," Mr. Hansen said, it does little to offset a decade's cumulative decline of approximately 20 per cent in "real" salaries—those adjusted for changes in consumer price levels.

In fact, "this year's gain may be a one-time occurrence, nothing more than a blip on the proverbial radar screen," Mr. Hansen told the association's annual meeting here last week.

Smaller Increases for 1983-84

The drop in the rate of inflation and the relative stability of consumer prices last year have made it difficult for faculty members to argue that they need larger salary increases, Mr. Hansen said. In fact, he noted, decreasing inflation plus the continuing economic difficulties of many state governments have already resulted in smaller increases in some faculty salaries for 1983-84.

The report is based on data collected from about 2,800 institutions by the A.A.U.P. and the federal government's National Center for Education Statistics.

The report indicated that the average salary for all faculty members at two-year and four-year colleges and universities last year was $27,430.

Faculty members teaching at universities earned an average of $31,010, while their colleagues at four-year undergraduate institutions made an average of

Continued on Page 20, Column 1

JOHN C. PHILLIPS

Five Years After Bakke

It's been five years since the Supreme Court ordered Allan Bakke, a white engineer, to be admitted to medical school in a much-publicized "reverse discrimination" case. But the ruling appears to have had little effect on the proportion of black students in professional schools.

For details, see Page 11.

Copyright

Continued from Preceding Page

the Law School Admission Council, against public inspection.

But the register's statement also noted that even the federal Trade Secrets Act did not prevent disclosure where it was authorized by another law, as it is in the case of copyrights.

The deadline for initial public comments on the statement is July 18.

List of Free Circulars

Meanwhile, the Copyright Office has announced the availability of 26 circulars—most of them new or recently revised—about federal copyright regulations and procedures, including a circular on registration for computer programs.

All of the circulars are free and may be ordered from the Copyright Office, Library of Congress, Information and Publications Section, LM-455, Washington 20559. Orders should specify the numbers of the circulars, which are listed below.

Copyright application forms may be ordered by leaving a recorded message at (202) 287-9100. For assistance, call (202) 287-8700.

RECENT CIRCULARS

▶ Circular R6—"Obtaining Copies of Copyright Office Records and Deposits" (November, 1982).

▶ Circular R40b—"Deposit Requirements for Registration of Claims to Copyright in the Visual Arts" (April, 1983).

▶ Circular R56a—"Copyright Registration of Musical Compositions and Sound Recordings" (February, 1983).

▶ Circular R61—"Copyright Registration for Computer Programs" (May, 1983).

▶ Circular R62—"Copyright Registration for Serials on Form SE" (March, 1983). According to the circular, serials are defined as "works issued or intended to be issued in successive parts bearing numerical or chronological designations and intended to be continued indefinitely." The classification includes such works as periodicals, newspapers, magazines, journals, and proceedings of meetings.

REVISED CIRCULARS

▶ Circular R1c—"Copyright Registration Procedures" (February, 1983).

▶ Circular R2—"Publications on Copyright" (March, 1983). Includes publications of the Copyright Office, the National Technical Information Service, the Library of Congress Photoduplication Service, and the Superintendent of Documents.

▶ Circular R4—"Copyright Fees Effective January 1, 1978" (published September, 1982).

▶ Circular R5—"How to Open and Maintain a Deposit Account in the Copyright Office" (May, 1983).

▶ Circular R8—"Supplementary Copyright Registration" (May, 1983).

▶ Circular R38a—"International Copyright Relations of the United States" (July, 1982).

▶ Circular R70—"Performances of Music on Coin-Operated Phonorecord Players" (June, 1982).

▶ Circular R71—"Replacement Certificates for Coin-Operated Phonorecord Players" (September, 1982).

▶ Circular R72—"Correcting Errors in Jukebox Certificates and Securing Appropriate Refunds" (September, 1982).

▶ Circular R99—"Highlights of the New Copyright Law" (August, 1982).

OTHER CIRCULARS

▶ Circular R96, Section 201.4—"Recordation and Transfers of Certain Other Documents" (January, 1983). Covered documents include certain cable-television-system contracts, notices on licensing for certain "phonorecords of nondramatic musical works," and statements on the identity of authors of "anonymous and pseudonymous works."

▶ Circular R96, Section 201.6—"Payment and Refund of Copyright Office Fees" (March, 1983).

▶ Circular R96, Section 201.8—"Import Statements" (January, 1983). Applies to works "consisting preponderantly of nondramatic literary material" in English that are to be imported into the U.S.

▶ Circular R96, Section 201.10—"Notices of Termination of Transfers and Licenses Covering Extended Renewal Term" (March, 1983).

▶ Circular R96, Section 201.13—"Notices of Objection to Certain Noncommercial Performances of Nondramatic Literary or Musical Works" (November, 1980).

▶ Circular R96, Section 201.14—"Warnings of Copyright for Use by Certain Libraries and Archives" (March, 1983).

▶ Circular R96, Section 201.15—"Voluntary License to Permit Reproduction of Nondramatic Literary Works Solely for the Use of the Blind and Physically Handicapped" (March, 1983).

▶ Circular R96, Section 201.17—"Renewals" (March, 1983).

▶ Circular R96, Section 201.20—"Methods of Affixation and Positions of the Copyright Notice on Various Types of Works" (January, 1983).

▶ Circular R96, Section 201.22—"Advance Notices of Potential Infringement of Works Consisting of Sounds, Images, or Both" (March, 1983).

▶ Circular R96, Section 201.23—"Transfer of Unpublished Copyright Deposits to the Library of Congress" (January, 1983).

Faculty Raises

Continued from Page 1

$22,890. Those at two-year colleges made an average of $23,700.

Although it outpaced inflation, the average salary increase actually dropped from 9 per cent for 1981-82 to 6.4 per cent this year. "This is a marked change from the previous five years, in which nominal salary increases rose rather steadily each year, from a low of 4.7 per cent in 1976-77 to a 9-per-cent figure in 1981-82," Mr. Hansen commented.

Last January, a survey conducted for *The Chronicle* estimated that the average salary increase for all faculty members at all types of institutions would be 7.6 per cent this year. Survey data were obtained directly from individual faculty members by John Minter Associates, whereas the A.A.U.P.'s data are obtained from institutions.

Salary increases were largest for faculty members in the lower ranks, indicating that institutions may have awarded the biggest increases to younger faculty members in an effort to retain them.

Mr. Hansen said the most striking change in the salary picture was a "widening discrepancy" between average increases for faculty members at private institutions and those at public colleges.

Faculty members at public colleges earned an average of $27,860 for 1982-83, compared with $28,680 for those at independent private institutions. Those at church-related institutions earned $22,950.

The report indicated that faculty salaries at public institutions rose 5.9 per cent, while those at independent private institutions increased 8.3 per cent. At church-related institutions, the increase was 7 per cent.

"This marks the third successive year that salary increases at public institutions lagged behind those of institutions in the other two sectors," Mr. Hansen remarked.

Public institutions employ almost three-quarters of the full-time faculty members, he said.

Report Copyrighted by AAUP

In a change of policy, the A.A.U.P. has copyrighted this year's report from the salary committee. It has distributed the complete report to association members in the July-August issue of *Academe*, the association's magazine; nonmembers may purchase the report for $25.

Because of the copyright, *The Chronicle* will not be able to publish the A.A.U.P.'s list of average salaries at individual institutions.

"The Annual Report on the Economic Status of the Profession, 1982-83" is available for $25 prepaid from the A.A.U.P., One Dupont Circle, Washington 20036. Additional tabulations may be ordered from Maryse Eymonerie Associates, P.O. Box 520, McLean, Va. 22101.

FACT-FILE

Average Faculty Compensation by Rank and Type of Institution, 1982-83

Academic rank	SALARY				COMPENSATION			
	Public	Independent private	Church-related	All	Public	Independent private	Church-related	All
Category I: Doctoral institutions								
Professor	$38,180	$43,950	$38,710	$39,380	$45,260	$53,080	$46,070	$46,890
Associate professor	28,310	30,440	29,290	28,700	33,830	36,730	35,150	34,370
Assistant professor	23,170	24,530	23,690	23,440	27,750	29,320	28,010	28,060
Instructor	17,550	19,970	19,880	18,060	20,900	23,720	23,510	21,490
Lecturer	20,420	21,090	19,360	20,500	25,300	25,190	22,850	25,210
All ranks	30,260	34,350	29,840	31,010	36,060	41,380	35,540	37,030
Category IIA: Comprehensive institutions*								
Professor	33,490	33,750	32,890	33,480	40,140	40,610	38,920	40,110
Associate professor	26,770	26,800	26,080	26,720	32,130	33,120	31,190	32,050
Assistant professor	22,040	21,590	21,380	21,910	26,350	25,510	25,380	26,140
Instructor	17,660	17,230	17,350	17,580	21,000	20,090	20,390	20,830
Lecturer	18,010	20,220	21,890	18,540	21,980	23,760	26,100	22,460
All ranks	26,940	26,440	25,800	26,790	32,280	31,570	30,660	32,050
Category IIB: Baccalaureate institutions								
Professor	30,770	32,410	26,130	29,320	36,340	39,380	31,130	35,080
Associate professor	25,530	24,370	21,710	23,580	30,430	29,340	25,720	28,110
Assistant professor	21,550	19,900	18,220	19,650	25,520	23,630	21,300	23,160
Instructor	18,240	16,940	15,580	16,720	21,570	19,670	17,890	19,440
Lecturer	18,610	21,020	15,050	18,610	22,130	25,190	17,150	22,070
All ranks	24,490	24,340	20,860	22,890	29,030	29,220	24,600	27,170
Category IIC: Specialized institutions								
Professor	37,970	33,260	23,330	32,380	43,890	39,880	28,780	38,460
Associate professor	29,530	25,880	20,180	26,280	34,380	30,920	24,100	31,050
Assistant professor	24,620	21,400	17,690	21,960	29,230	25,220	20,700	25,940
Instructor	19,070	17,120	14,740	17,170	22,810	20,400	17,120	20,410
Lecturer	22,160	13,560	†	18,700	27,610	15,480	†	22,690
All ranks	29,780	25,150	20,290	25,840	34,820	29,980	24,440	30,610
Category III: 2-year institutions with academic rank								
Professor	30,480	22,690	19,750	30,080	36,710	27,040	23,130	36,200
Associate professor	25,840	20,640	18,720	25,560	30,950	24,810	22,170	30,620
Assistant professor	21,840	17,130	16,920	21,490	26,210	20,160	19,610	25,750
Instructor	18,880	13,500	13,540	18,270	22,650	15,740	15,680	21,860
Lecturer	16,010	†	‡	15,600	19,220	†	‡	18,770
All ranks	24,190	17,290	16,730	23,700	29,040	20,460	19,500	28,420
Category IV: 2-year institutions without rank								
No rank	24,960	15,810	15,040	24,340	29,320	18,340	17,490	28,580
All categories combined except IV:								
Professor	35,520	38,540	29,060	35,470	42,230	46,530	34,650	42,350
Associate professor	27,260	27,320	23,680	26,840	32,610	32,860	28,100	32,120
Assistant professor	22,460	21,950	19,470	21,950	26,860	26,070	22,880	26,170
Instructor	18,100	17,190	15,960	17,640	21,580	20,190	18,440	20,900
Lecturer	19,580	20,380	19,140	19,700	24,100	24,220	22,530	24,050
All ranks	27,860	28,680	22,950	27,430	32,260	34,420	27,190	32,760

Percentage Increases from 1981-82 to 1982-83

Academic rank	SALARY				COMPENSATION			
	Public	Independent private	Church-related	All	Public	Independent private	Church-related	All
Category I: Doctoral institutions								
Professor	5.9%	9.2%	9.4%	6.7%	6.3%	9.6%	9.8%	7.1%
Associate professor	6.1%	8.7%	8.4%	6.6%	6.7%	9.4%	9.3%	7.2%
Assistant professor	6.6%	9.7%	8.4%	7.2%	7.2%	11.0%	9.1%	7.9%
Instructor	6.5%	7.8%	8.5%	6.8%	7.2%	7.8%	9.4%	7.4%
All ranks	6.1%	9.1%	8.8%	6.8%	6.6%	9.8%	9.5%	7.3%
Category IIA: Comprehensive institutions*								
Professor	4.6%	6.3%	6.8%	4.9%	4.7%	6.7%	7.4%	5.3%
Associate professor	5.2%	7.9%	7.5%	5.7%	5.3%	8.2%	8.6%	6.0%
Assistant professor	5.7%	7.7%	7.2%	6.1%	5.6%	8.1%	7.9%	6.1%
Instructor	5.6%	9.4%	8.4%	6.2%	5.5%	10.0%	8.9%	6.2%
All ranks	5.0%	7.3%	7.2%	5.5%	5.0%	7.6%	8.0%	5.6%
Category IIB: Baccalaureate institutions								
Professor	5.9%	8.1%	6.8%	7.0%	6.6%	8.3%	6.9%	7.3%
Associate professor	6.3%	8.1%	6.5%	6.8%	6.9%	8.2%	6.7%	7.2%
Assistant professor	6.9%	7.3%	6.6%	6.9%	7.5%	7.5%	6.9%	7.2%
Instructor	7.5%	8.4%	6.5%	7.3%	8.2%	8.7%	6.5%	7.6%
All ranks	6.5%	7.9%	6.6%	6.9%	7.1%	8.1%	6.8%	7.3%
Category IIC: Specialized institutions								
Professor	8.0%	8.2%	5.8%	7.7%	8.3%	7.7%	5.9%	7.6%
Associate professor	6.9%	7.8%	4.8%	7.0%	7.1%	7.5%	5.0%	7.0%
Assistant professor	9.4%	7.2%	5.9%	8.0%	10.9%	7.4%	7.2%	9.0%
Instructor	3.2%	3.6%	4.4%	3.6%	4.1%	4.5%	6.3%	4.6%
All ranks	7.8%	7.4%	5.5%	7.2%	8.4%	7.2%	6.0%	7.5%
Category III: 2-year institutions with academic rank								
Professor	8.4%	4.0%	3.5%	8.3%	9.1%	3.7%	4.3%	8.9%
Associate professor	6.4%	3.4%	3.2%	6.3%	7.1%	3.4%	4.8%	7.0%
Assistant professor	6.9%	6.0%	7.3%	6.9%	7.5%	6.3%	7.1%	7.4%
Instructor	7.7%	2.8%	4.8%	7.2%	8.3%	3.7%	5.4%	7.9%
All ranks	7.2%	4.0%	5.3%	7.1%	7.9%	4.4%	5.6%	7.7%
Category IV: 2-year institutions without academic rank								
No rank	5.6%	6.3%	5.0%	5.6%	5.9%	6.1%	5.1%	5.9%
All categories except IV:								
Professor	5.6%	8.4%	7.1%	6.3%	5.6%	8.7%	7.4%	6.4%
Associate professor	5.8%	8.2%	6.9%	6.3%	6.1%	8.6%	7.5%	6.6%
Assistant professor	6.4%	8.3%	6.9%	6.8%	6.8%	8.9%	7.4%	7.2%
Instructor	6.5%	7.0%	6.8%	6.7%	6.9%	7.5%	7.1%	7.0%
All ranks	5.9%	8.3%	7.0%	6.4%	6.1%	8.7%	7.4%	6.7%

* Institutions that award degrees beyond the bachelor's degree but do not qualify for Category I.

† Too few individuals to warrant publication of data.

‡ No data reported.

SOURCE: AMERICAN ASSOCIATION OF UNIVERSITY PROFESSORS

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News Summary

Articles on inside pages

Twenty universities will receive $40-million worth of computers from I.B.M. to familiarize engineering students with new manufacturing and design technology. Story on Page 3.

Arkansas College, a small liberal-arts institution, thrives while others like it languish—thanks to a $14-million bequest and some shrewd investments. Story on Page 5.

The chairman of National Public Radio resigned last week as part of a management shake-up at the network. Story on Page 7.

Gifts to charitable and educational institutions hit a record high in 1982, according to a recent report. Story and Fact-File on Page 8.

Students at last week's third International Student Pugwash Conference confronted such issues as computers, biotechnology, and nuclear weapons. Story on Page 12.

Leasing arrangements used by colleges to alleviate their financial problems have met opposition from Congress. Story on Page 13.

Wichita State University is trying to straighten out its sports program, which has been penalized for cheating more than any other. Story on Page 19.

The companies that operate higher education's principal pension program do not plan to alter their basic approach. Story on Page 23.

A government plan to limit the number of blacks who may attend white universities in South Africa has met vehement opposition. Story on Page 21.

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Hew to Strict Ideological Guidelines, Soviet Officials Warn Academics

WIDE WORLD

Konstantin Chernenko, left, with Premier Nikolai Tikhonov and President Yuri Andropov, has become a leading Soviet spokesman on ideology.

By RICHARD OWEN

MOSCOW

Top Russian leaders have warned Soviet scientists, faculty members, and writers that they will have to observe much tougher ideological guidelines in the future.

Calls for a harder line were frequent at a recent meeting on ideology organized by the Communist Party's Central Committee and at this month's meeting of the Supreme Soviet, where Yuri Andropov was elected president of the Soviet Union.

One top leader, Konstantin Chernenko, said that in the future the Communist Party would define what constituted "the mainstream of the social sciences."

The meetings saw the re-emergence of Mr. Chernenko as a senior political figure. He and Mr. Andropov were rivals last November, and his role was reduced when Mr. Andropov was chosen as Leonid Brezhnev's successor. However, Mr. Chernenko now seems to have established himself as the Kremlin's chief spokeman on ideological policy.

At the Central Committee meeting, he said "imperialism" was attempting to undermine Marxist-Leninist ideology. He called on scholars and scientists

Continued on Page 22, Column 3

AAUP Censures 6 Colleges, Lifts Sanctions from CUNY, 2 Others

By BEVERLY T. WATKINS

WASHINGTON

The American Association of University Professors has censured six colleges and universities—the most it has censured at one meeting in a decade—for violations of academic freedom.

Added to the censure list this year were American International College, Auburn University, Goucher College, the University of Idaho, Morehead State University in Kentucky, and Sonoma State University.

Delegates to the A.A.U.P.'s sixty-ninth annual meeting also voted to lift censure from three institutions—Arizona State University, Armstrong State College, and the City University of New York—that were placed on the list in the 1970's.

There are now 45 institutions and governing boards on the A.A.U.P.'s censure list.

Goucher, Idaho, and Sonoma State were censured for using financial exigency as an excuse to dismiss specific faculty members. Delegates acted after the A.A.U.P.'s Committee A, which investigates complaints about violations of academic freedom and tenure on the campuses, reported

Continued on Page 10, Column 1

Law Tying Aid to Draft Sign-Up Barred by Judge

U.S. to appeal decision to Supreme Court

By JANET HOOK

A federal judge in Minnesota has struck down a law barring young men from receiving federal student aid if they have not registered for the draft, saying it violated students' constitutional right to avoid self-incrimination.

The issue is now headed to the Supreme Court.

Judge Donald D. Alsop of the U.S. District Court for Minnesota issued a permanent injunction barring the Education Department from enforcing "in any state" the law linking eligibility for federal aid to students' draft-registration status.

He also ordered the elimination of references to the registration requirement from student-aid forms used after June 30.

A Justice Department spokesman said the government would appeal Judge Alsop's ruling directly to the Supreme Court. Government lawyers last week asked the Court to stay the injunction until it has reviewed the case.

'Further Confusion'

Judge Alsop himself last week refused a Justice Department request that he halt his order pending the outcome of the government's appeal.

"A stay would create further confusion and allow continued enforcement of a law the court has found to be unconstitutional," Judge Alsop said. "That result would not be in the public interest."

Because the Supreme Court is expected to recess for the summer in early July, final resolution of the legal battle is not expected until the Court's 1983-84 term.

Unless Judge Alsop's injunction against enforcement of the law is put on hold by the Supreme Court, his ruling makes it more likely than ever that the registration requirement will not apply to students receiving grants and loans for the 1983-84 academic year.

At issue is a law, which was passed by Congress last summer, that would require draft-age men to certify that they had regis-

Continued on Page 16, Column 1

Sociobiology Moves Onward

Eight years after Edward O. Wilson published *Sociobiology*, the study of the biological bases of human behavior is well established, but it still provokes vehement criticism and questions about its usefulness to social science.

For details, see the "Publishing" section, which begins on Page 25.

FACT-FILE

Giving in 1982: Colleges Got $8.59-Billion

NEW YORK

Voluntary giving to educational and charitable organizations reached a record high of $60.39-billion in 1982, according to a new report from the American Association of Fund-Raising Counsel.

The total, which was boosted by a bequest of $1.3-billion to the Getty Museum in California from a settlement in the estate of the late J. Paul Getty, amounted to an increase of 11.7 per cent over the previous year. Without the bequest, giving would have increased 9.3 per cent, the annual report said.

For the second consecutive year, the increase in giving exceeded the rate of inflation. Using an annual inflation rate of 3.9 per cent, the report estimated that real growth in giving was 7.8 per cent.

Of the total giving in 1982, an estimated $8.59-billion, or 14.2 per cent, went to educational institutions, agencies, and organizations, including colleges and universities and church-related and other private elementary and secondary schools. The total for education also included money for research that is educational in nature and conducted by educational institutions.

The association reported that total giving to education was up 13.1 per cent over 1981. This increase was less than the 14.9 per cent reported earlier by the Council for Financial Aid to Education. A difference in the formulas used by corporations and higher-education institutions to calculate the value of noncash gifts could account for the discrepancy, the report indicated.

The association found that educational institutions received a greater share of both foundation and corporate giving last year than they had in the past.

The report speculated that increasing awareness of the problems that result from reduced federal funds and declining enrollments may have encouraged some corporations and foundations to give more to education. Whether or not the increase this year marks the beginning of a trend is "still a question," the report commented.

The 1983 annual report, *Giving U.S.A.*, is available for $25 from the American Association of Fund-Raising Counsel, 25 West 43rd Street, Suite 1519, New York 10036. Subscribers to the association's newsletter may purchase extra copies of the report for $18

Top 52 Foundations in 1982 Ranked by Grants Awarded

	1981 grants	1982 grants	1982 assets†
1. Ford Foundation	$ 89,089,000	$ 97,835,000	$ 2,882,501,000
2. Andrew W. Mellon Foundation	58,423,000	59,259,000*	1,000,000,000*
3. Pew Memorial Trust	51,272,000	57,798,000	1,000,000,000*
4. W. K. Kellogg Foundation	49,813,000	52,394,000	1,046,224,000
5. Robert Wood Johnson Foundation	35,858,000	49,530,000	1,421,085,000
6. Lilly Endowment	30,240,000	42,277,000	779,036,000
7. Rockefeller Foundation	42,558,000	39,546,000	1,014,354,000
8. Duke Endowment	35,818,000	36,716,000	462,658,000
9. Kresge Foundation	38,360,000	32,294,000	681,468,000
10. McKnight Foundation	25,737,000*	28,396,000	409,563,000
11. Richard King Mellon Foundation	8,795,000*	23,030,000	390,080,000
12. Charles Stewart Mott Foundation	27,693,000	23,029,000	471,299,000
13. Alfred P. Sloan Foundation	15,542,000	16,720,000	316,000,000
14. Moody Foundation	13,500,000*	16,000,000*	220,000,000*
15. Bush Foundation	12,257,000	13,696,000	247,720,000
16. Carnegie Corporation of New York	11,686,000	13,524,000	380,699,000
17. Amon G. Carter Foundation	6,254,000	13,217,000	130,000,000
18. Edna McConnell Clark Foundation	11,929,000	12,341,000	242,183,000
19. Rockefeller Brothers Fund	26,608,000	10,686,000	161,839,000*
20. Henry J. Kaiser Family Foundation	12,476,000	13,424,000	219,905,000
21. James Irvine Foundation	14,122,000	13,036,000	235,759,000
22. Surdna Foundation	9,466,000	10,838,000	176,608,000
23. William Penn Foundation	8,990,000	10,437,000	168,585,000
24. Gannett Foundation	8,752,000	9,880,000	355,935,000
25. John A. Hartford Foundation	10,257,000	9,697,000	141,563,000
26. Vincent Astor Foundation	12,193,000	8,113,000	42,699,000
27. Commonwealth Fund	7,292,000	7,809,000	135,425,000
28. Hearst Foundations	7,200,000*	7,748,000	207,700,000
29. Z. Smith Reynolds Foundation ‡	6,483,000	7,645,000	none
30. Howard Heinz Endowment	5,640,000**	7,234,000	139,677,000
31. Northwest Area Foundation	7,276,000	7,201,000	118,181,000
32. Sarah Scaife Foundation	6,274,000*	6,016,000	122,066,000
33. William R. Kenan, Jr., Charitable Trust	6,167,000	6,005,000	128,228,000
34. Charles H. Revson Foundation	4,570,000	5,836,000	74,000,000
35. Charles Hayden Foundation	6,312,000	5,626,000	79,530,000
36. George Gund Foundation	5,518,000	5,487,000	95,400,000
37. Claude Worthington Benedum Foundation	5,559,000	5,464,000	97,132,000
38. John Simon Guggenheim Memorial Foundation	5,123,000	5,419,000	101,320,000
39. Mary Flagler Cary Charitable Trust	3,261,000	5,002,000	61,412,000
40. Sid W. Richardson Foundation	7,736,000*	4,986,000	121,000,000
41. Smith Richardson Foundation	4,994,000	4,910,000	98,702,000
42. Charles A. Dana Foundation	10,128,000	4,757,000	110,000,000
43. Caliaway Foundation	5,870,000	4,580,000	94,143,000
44. Henry Luce Foundation	5,556,000	4,400,000*	156,000,000*
45. El Pomar Foundation	3,587,000	3,844,000	95,000,000
46. William T. Grant Foundation	3,248,000	3,600,000	79,600,000*
47. Danforth Foundation	3,131,000	3,384,000	92,000,000
48. John and Mary Markle Foundation	3,585,000	3,215,000	48,358,000
49. Research Corporation	2,481,000	2,337,000	47,233,000
50. Camille and Henry Dreyfus Foundation, Inc.	1,927,000	1,791,000	23,000,000
51. Tinker Foundation	1,575,000	1,683,000	35,797,000
52. Elliott White Springs Foundation	1,490,000	1,509,000	18,886,000
Total	**$799,509,000**	**$841,201,000**	**$16,977,553,000**

* Estimate
** 1980 figure
† Market value at end of year
‡ Includes assets and excise taxes of two trusts

Largest Gifts to Colleges

Recipient	Donor	Amount
Columbia U.	W. Averell Harriman & family	$11,000,000
New York U.	Laurence Tisch & Preston Robert Tisch	7,500,000
St. Mary's U. of San Antonio	John G. & Marie Stella Kenedy Memorial Foundation	7,500,000
Armand Hammer United World College of the American West	Armand Hammer	6,000,000
Princeton U.	James C. Donnell, II	5,600,000
Auburn U.	John M. Harbert, III	5,000,000
U. of Illinois	Mrs. Marajen Steveck Chinigo	5,000,000
U. of Santa Clara	Thomas & Dorothy Leavey Foundation	5,000,000
U. of the South	Clarita F. Crosby	5,000,000
Rollins College	Olin Foundation	4,700,000
U. of Virginia	Anonymous	4,100,000
U. of Michigan	W.K. Kellogg Foundation	4,000,000
U. of Pennsylvania	Pew Memorial Trust	4,000,000
Princeton U.	Forbes Foundation	4,000,000
Stanford U.	Knight Foundation	4,000,000
Yeshiva U.	Max Stern	3,750,000
Wilmington College	Crystal Trust	3,300,000
Columbia U.	Lawrence A. Wien	3,000,000
DePauw U.	Ruth Lilly	3,000,000
U. of Illinois at Urbana-Champaign	Helene R. Foellinger	3,000,000
Indiana Central U.	Anonymous	3,000,000
U. of Puget Sound	Anonymous	3,000,000
Thomas Jefferson U.	Pew Memorial Trust	3,000,000*
Cornell U.	J. N. Pew, Jr., Charitable Trust	2,500,000
Loyola Marymount U.	Conrad N. Hilton Foundation	2,500,000
Syracuse U.	Mrs. Lester Schine Crown & Family	2,500,000
California State U.	W.K. Kellogg Foundation	2,300,000
C. of St. Teresa	Sisters of St. Frances	2,300,000
Stanford U.	J.V.M. Stearns	2,300,000
Brown U.	A. Alfred Taubman	2,000,000
U. of Michigan at Flint	Anonymous	2,000,000
U. of Toledo	Stranahan Foundation	2,000,000
U. of Pennsylvania	W. K. Kellogg Foundation	1,900,000
U. of California at Berkeley	Semiconductor Research Corporation	1,750,000
Carnegie-Mellon U.	Semiconductor Research Corporation	1,750,000
U. of Southern California	Litton Industries	1,750,000
Duke U.	Duke Endowment	1,700,000
Duquesne U.	Allegheny International Corporation	1,500,000
Ohio U.	Scripps Howard Foundation	1,500,000
U. of Pennsylvania	ARA Services, Inc.	1,500,000
Roanoke College	John A. & Nancy Mulheren	1,500,000
U. of Southern California	W. M. Keck Foundation	1,500,000
Thomas Jefferson U.	Pascal Brooke Bland	1,500,000
United Negro College Fund	Kresge Foundation	1,500,000
Wabash College	Ruth Lilly	1,300,000
U. of Minnesota	3M Company	1,200,000
U. of Minnesota	Minnesota Mining & Manufacturing Foundation	1,200,000
Texas A&M U.	Ella C. McFadden Charitable Trust Foundation	1,200,000
U. of Michigan	Herbert H. & Grace A. Dow Foundation	1,150,000
U. of Cincinnati	Corbett Foundation	1,000,000

* Over a 2-year period

Largest Bequests to Colleges

Recipient	Donor	Amount
Harvard U.	Edward Mallinckrodt, Jr.	$77,000,000
Washington U. (Mo.)	Edward Mallinckrodt, Jr.	38,000,000
Cornell Medical Center	John Hay Whitney	15,000,000
Duke U.	Edwin C. Whitehead	10,000,000*
U. of Texas at Tyler	Louise Lindsey Merrick	10,000,000
Hampshire College	Harold F. Johnson	5,000,000
U. of Miami	Anonymous	5,000,000
College of William and Mary	Laura Lee	5,000,000
Yale U.	John Hay Whitney	5,000,000
Millikin U.	Purvis F. Tabor	3,500,000
U. of California at Los Angeles	Edward W. Carter	3,000,000
Missouri Valley College	Georgia Robertson Burns	3,000,000
Belmont Abbey College	Anne Baldwin Horne Little	2,550,000
Whitman College	Mina S. Schwabacher	2,500,000
Occidental College	J.V.M. Stearns	2,300,000
Albany Medical College	Henry Schaffer	2,000,000
Gonzaga U.	Alphonse A. Arnold	2,000,000
U. of Toledo	Mrs. Helen C. Ponton deArce	2,000,000
Lehigh U.	Earle F. Johnson Trust	1,900,000
Colby College	Jere Abbott	1,600,000
U. of Florida	Richard C. Milbauer	1,500,000
Saint Leo College	Richard C. Milbauer	1,500,000
U. of Virginia	Pascal Brooke Bland	1,500,000
U. of Virginia	Madeline Morcy	1,500,000
Louisiana College	Willie & Maggie Day	1,250,000
U. of Michigan	Arthur R. Modine	1,200,000
Nebraska Wesleyan U.	Hattie & Elvena Holling	1,200,000
Saint Norbert College	Gregoire Denis	1,200,000
U. of Michigan	Hazel Leone Long	1,100,000
Butler U.	Krannert Charitable Trust	1,000,000
New York U.	Willard T.C. Johnson	1,000,000
Sweet Briar College	Mr. & Mrs. Charles N. Prothro	1,000,000
Whitman College	Grace Farnsworth Phillips	1,000,000

* Over a 10-year period.

SOURCE: AMERICAN ASSOCIATION OF FUND-RAISING COUNSEL

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News

The Administration wants to tax such fringe benefits as free tuition for faculty members' dependents and low-cost faculty housing. Story on Page 7.

National Public Radio may be saved from bankruptcy by a plan proposed by the Corporation for Public Broadcasting and involving the help of local public radio stations. Story on Page 3.

Tape recordings made by President Kennedy offer insight into his negotiations with Gov. Ross Barnett concerning the integration of the University of Mississippi. Story on Page 4.

Freshman applications are up at private colleges and down at public institutions, compared to this time a year ago. Story on Page 6.

In the wake of the Supreme Court decision on legislative vetoes, the Education Department may lose some of its discretion in setting rules for aid to colleges. Story on Page 7.

A federal court will not reconsider its ruling that the N.C.A.A.'s control of television rights to college football games constitutes a monopoly. Story on Page 13.

The party system in the U.S. is "out of control," according to two recently published books by political scientists. Story on Page 17.

South Africa's government will review all future issues of two of the country's leading student publications. Story on Page 15.

A special commission in France has criticized the lack of adequate resources for computer-science education at the country's universities. Story on Page 15.

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State Tax Break f[illegible] Tuition Upheld [illegible] reme Court

[illegible] HERYL M. FIELDS

WASHINGTON

The Supreme Court last week gave a boost to supporters of tuition tax credits when it upheld a Minnesota law that allows deductions from state income taxes for tuition and other expenses paid by parents of children in elementary and secondary schools.

In a 5-to-4 decision, the Court said the law did not unconstitutionally advance religion because all parents, not just those with children in private or parochial schools, were eligible for the deductions for "tuition, textbooks, and transportation."

Representatives of teachers' unions and public schools and colleges expressed concern that the decision could encourage other states to adopt laws similar to Minnesota's and would increase the pressure on Congress to approve tuition tax credits.

They fear that tax deductions or tuition tax credits will drain government resources away from public education and, if extended to college tuition, could threaten established student-aid programs.

The financial problems facing the federal government and many state governments could hinder the push for special tax benefits, however.

The Senate Finance Committee ap-

Continued on Page 8, Column 1

U.S. Told It Can Enforce Law Linking Draft Registration to Eligibility for Student Aid

High Court lifts injunction; college officials fear havoc

By JANET HOOK

WASHINGTON

The Supreme Court, in a move some fear will wreak havoc with student-aid programs this summer, last week told the government it could begin enforcing a law denying federal financial aid to young men who have failed to register for the draft.

In a one-paragraph order, the Court lifted an injunction issued by a federal judge in Minnesota that would have prevented the law from taking effect, as scheduled, on July 1.

The Reagan Administration, which had asked the Supreme Court to lift the injunction, is appealing the Minnesota judge's ruling that the law is unconstitutional. The Supreme Court's order leaves the registration requirement in force at least until the Court rules on the government's appeal.

The Court is not expected finally to resolve the legal controversy until after its 1983-84 term begins in October.

In the meantime, students applying for federal aid for the 1983-84 academic year will have to certify that they have complied with the draft law before their grant and loan checks can be disbursed by colleges and banks.

The Court's order, which was issued just two days before the law was to take effect, required college financial-aid offices to quickly shift gears and begin imposing the registration requirement.

Education Department officials last week were considering ways to ease the transition and minimize disruption, particularly at colleges that have summer terms beginning in the next few weeks.

Law Passed Last Summer

For almost four months before the Supreme Court acted, colleges had been barred by the Minnesota judge from requiring students to provide information about their draft-registration status when they applied for financial aid for the summer and fall terms—although some colleges have encouraged students to supply such information voluntarily.

The law barring draft-age men from receiving federal student aid if they have not registered with the Selective Service was passed by Congress last summer and applies to federal grants or loans made after June 30.

In early March, Judge Donald D. Alsop

Continued on Page 9, Column 1

Summer-Session Income Eases Colleges' Money Woes

By JACK MAGARRELL

Budget strains are prompting some colleges and universities to try to reap additional profits from successful summer sessions.

Most summer sessions pay their own way, collecting enough tuition to cover at least the direct costs of instruction. Traditionally their financial independence has insulated them from many of the problems that affect their institutions during the regular academic year.

Summer enrollments—and thus tuition revenue—generally have remained strong through the recent recession years.

At many institutions, summer tuition revenue not only covers direct costs but produces a surplus that is used to reimburse the university for overhead costs, such as administrative services, utilities, and maintenance. Additional surpluses may be used to augment the college or university's general operating expenses during the regular academic year.

Among the institutions taking a bigger bite of summer revenues this year is the University of California at Los Angeles, where summer enrollment is expected to rise to 14,000 from last year's 13,000.

Gary W. Penders, associate director of summer sessions at U.C.L.A., says the share of summer revenues turned over to the university administration has been in-

Continued on Page 6, Column 3

PHOTOGRAPH FOR THE CHRONICLE BY NORM SCHINDLER

One of the more successful summer schools is the one at the U. of California at Los Angeles, above, where more than 14,000 students are expected this summer.

CHRONICLE SURVEY

Most Private Colleges Report Increases in Freshman Applications for Fall

The majority of private colleges and universities had received more freshman applications by May 31 of this year than by the same date last year, according to a new survey conducted for *The Chronicle*. However, the number of applications was down at a majority of public institutions.

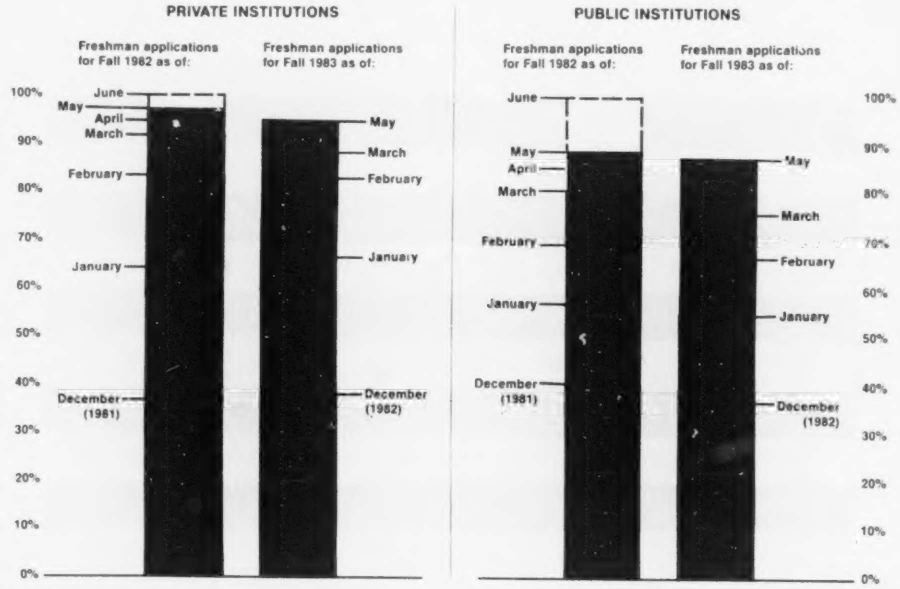
The total number of applications was down 0.2 per cent.

The increase in applications in the private sector and the decrease in the public sector continued a trend that appeared late in 1982, when the first survey of 1983 freshman applications was conducted.

In the new survey, which was based on a stratified random sample of 391 four-year colleges and universities with enrollments of more than 500 students, 54.4 per cent of the private institutions had received more freshman applications for next fall's class, while 55.4 per cent of the public institutions had received fewer applications.

The largest increase—7.3 per cent—occurred at private colleges with enrollments of between 500 and 1,000 students. More than 65 per cent of those institutions reported an increase this year.

The survey was conducted for *The Chronicle* by John Minter Associates, a higher-education research organization in Boulder, Colo.



Note: All percentages are of June, 1982, total

CHRONICLE CHART BY PETER H. STAFFORD

Changes in Number of Freshman Applicants

May 31, 1983, compared with May 31, 1982

	Change in average (a)	Per cent reporting increase	Per cent reporting decrease	Per cent change		
				Low (b)	Median (c)	High (d)
Private colleges and universities						
Research and Ph.D.-granting	– 1.8%	31.8%	68.2%	– 7.2%	– 3.1%	+ 3.7%
Comprehensive (e)	– 2.9%	38.4%	60.5%	– 10.1%	– 2.7%	+ 3.3%
Liberal arts	+ 1.3%	59.9%	40.1%	– 7.9%	+ 3.3%	+ 18.7%
Regions						
Northeast and Mid-Atlantic	– 3.2%	39.4%	60.6%	– 9.7%	– 2.2%	+ 4.3%
Great Lakes and Plains	– 1.1%	58.0%	42.0%	– 7.7%	+ 2.4%	+ 14.8%
Southeast	+ 0.4%	47.6%	52.4%	– 11.3%	– 1.4%	+ 10.1%
West and Southwest	+ 5.5%	61.8%	35.3%	– 8.6%	+ 2.7%	+ 11.8%
Enrollment						
500 – 999	+ 7.3%	65.4%	34.6%	– 6.4%	+ 6.6%	+ 21.7%
1,000 – 2,499	– 1.0%	48.4%	50.8%	– 9.5%	– 0.8%	+ 10.6%
2,500 – 4,999	– 2.5%	45.9%	54.1%	– 9.8%	– 2.5%	+ 3.6%
5,000 – 9,999	– 2.5%	36.4%	63.6%	– 9.0%	– 3.1%	+ 3.7%
10,000 and over	– 1.1%	30.8%	69.2%	– 4.3%	– 1.7%	+ 0.3%
All private institutions	**+ 0.4%**	**54.4%**	**45.4%**	**– 8.7%**	**– 0.2%**	**+ 10.7%**
Public colleges and universities						
Research and Ph.D.-granting	– 1.2%	41.2%	58.8%	– 6.8%	– 2.1%	+ 3.9%
Comprehensive (e)	– 1.4%	45.7%	54.3%	– 8.0%	1.0%	+ 6.5%
Regions						
Northeast and Mid-Atlantic	+ 0.8%	47.8%	52.2%	– 6.1%	2.0%	+ 9.2%
Great Lakes and Plains	– 3.1%	33.3%	66.7%	– 8.2%	– 3.5%	+ 1.5%
Southeast	+ 2.1%	59.5%	40.5%	– 3.9%	+ 2.9%	+ 7.5%
West and Southwest	– 5.2%	37.5%	62.5%	– 9.7%	– 4.7%	+ 1.6%
Enrollment						
500 – 2,499	+ 0.2%	50.0%	50.0%	– 7.6%	1.0%	+ 5.0%
2,500 – 4,999	– 2.5%	40.0%	60.0%	– 9.1%	– 5.5%	+ 8.6%
5,000 – 9,999	– 2.5%	48.5%	51.5%	– 9.6%	– 0.6%	+ 3.1%
10,000 – 19,999	– 0.6%	44.7%	55.3%	– 6.2%	– 1.7%	+ 4.0%
20,000 and over	– 1.1%	38.1%	61.9%	– 6.1%	– 2.9%	+ 4.9%
All public institutions	**– 1.3%**	**44.6%**	**55.4%**	**– 7.6%**	**– 1.2%**	**+ 4.9%**
All institutions	**– 0.2%**	**51.0%**	**48.9%**	**– 7.9%**	**– 0.7%**	**+ 7.5%**

(a) Percentage change in mean number of applications received by May 31, 1983, compared with the mean for a year earlier
(b) One-fourth of the institutions reported changes smaller than the percentage shown
(c) Half of the institutions reported changes greater than the percentage shown
(d) One-fourth of the institutions reported changes greater than the percentage shown
(e) Institutions with more than 1,500 students, a liberal-arts program, and at least one professional program
Note: Survey data are from a stratified random sample of 391 four-year colleges and universities, excluding those with enrollment under 500

SOURCE: SURVEY FOR THE CHRONICLE BY JOHN MINTER ASSOCIATES

Summer

Continued from Page 1

creasing during the past few years and will amount to about 25 per cent this year.

At U.C.L.A., a major portion of the summer-session income turned over to the university is for services provided, but about 10 per cent goes into the instructional budget to help pay operating costs during the regular academic year, Mr. Penders says.

A. Clay Schoenfeld, director of intercollege programs at the University of Wisconsin at Madison and author of the book *The American University in Summer*, says a summer session's profits have always been welcomed, but recently "pressures for it to be a profitable enterprise have been heightened."

Leslie J. Coyne, president of the North Central Conference on Summer Schools and director of the summer session at Indiana University at Bloomington, says that some institutions do see summer sessions as a resource that can be tapped for support of the academic-year budget.

A summer program that has been generating revenue 20 per cent above direct costs may be told by the central administration that the university needs 30 per cent for overhead, Mr. Coyne says, so the summer session has to tighten up.

Usually, summer sessions respond to such demands by raising tuition rates. That can be self-defeating, Mr. Coyne says, because strong competition exists among institutions for summer enrollment.

Loss of enrollment also is likely if the summer program tries to produce more revenue by increasing class size, canceling small courses, reducing the number of courses offered, or offering them at less convenient times, he says.

"If you're not careful you can kill off demand," he says. "The key to success in summer is your program. You've got to have a program that is timed right and that kids are willing to buy into. We are a demand-driven program."

Drop in Graduate Enrollment

Generally, summer enrollment of undergraduates has increased enough in recent years to offset declines in graduate enrollment.

Melvin Bernstein, administrative dean for the summer program at the University of Maryland's College Park campus, says summer enrollment of graduate students apparently is following the pattern of the regular academic year. Nationally, fall enrollment of graduate students has declined by about 1 per cent in each of the last two years.

Faced with unfavorable job markets, more students apparently are "just not willing to make the additional investment" in graduate education, Mr. Bernstein says.

Although rising numbers of undergraduates have helped maintain summer tuition revenue, Mr. Bernstein says, that does not help maintain summer graduate programs.

Mr. Bernstein, who is president of the Association of University Summer Sessions, says that some private universities may be using earnings of summer programs to help solve general budget problems but that public institutions are not pressing summer programs to raise extra money.

On Maryland's College Park campus, enrollment in this year's two summer sessions is expected to be about 15,600, approximately the same as last summer's total. About 20 per cent of the summer students attend other institutions during the regular academic year, he says.

Historically, summer enrollment tends to grow during economic hard times, says Wisconsin's Mr. Schoenfeld.

"Young people continue or accelerate their education in times of a slow economy," he says. That was true during the depression following World War I, during the early 1930's, and again during the 1980's recession, he says.

But Indiana's Mr. Coyne warns that economic hard times cannot serve indefinitely as an incentive for enrollment.

"One hears that summer enrollment will improve when there are no summer jobs, but when there are no summer jobs and no disposable income," he says, "students go into limbo, just stay at home and mow the yard."

When students run short of money, he says, summer sessions at urban universities may fare better than others because students save money by living with their parents.

Summer enrollment this year may be bolstered by people beginning to feel more optimistic about the economy, he says.

Mr. Coyne contends that university budget pressures have encouraged decentralization and loss of coordination in summer programs, with deans of individual colleges taking control of their own summer courses.

Mr. Schoenfeld disagrees, arguing that there are just as many instances of more centralized control of summer programs because of budget pressures for increased efficiency.

Mr. Schoenfeld says summer programs "have always been very responsive to student needs in terms of curriculum and schedule building."

He expects a sudden blossoming next year of summer courses and institutes to meet a resurgence of demand for teachers better prepared to teach mathematics and science in elementary and secondary schools.

Some summer programs already have added new courses for mathematics and science teachers, he says, demonstrating again the flexibility of summer curricula.

Trying out new courses is easier in the summer than in the regular academic year, he says. A summer session usually will include a half-dozen new courses for testing. Those that prove successful enter the regular academic-year curriculum.

Mr. Schoenfeld says many courses on environmental studies, black studies, and women's studies were first offered in summer sessions.

He suggests that colleges and universities seeking to make their regular curricula more attractive to students should consult their summer-session directors, who have been designing programs to meet student demand for many years.

Summer students are "more on their own" when it comes to paying for college expenses, Mr. Schoenfeld says.

Although federal guidelines for student financial aid make no distinction between summer students and those enrolled during the regular academic year, he says, local financial-aid officers may be less eager to grant aid to summer students. What they spend on summer students, they cannot spend during the regular academic year.

At some institutions, fees are lower during summer sessions than in regular terms, Mr. Schoenfeld says, reflecting either demands of competition or the history of financial independence for summer programs.

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News Summary

Articles on inside pages

Merit scholarships have been eliminated at Smith and Mount Holyoke Colleges following criticism from other colleges and universities that favor need-based awards. Story on Page 2.

Proposals by the Reagan Administration to cut the federal education budget in 1984 drew strong criticism from the U.S. Commission on Civil Rights. Story on Page 4.

A federal panel has urged the Energy Department to abandon construction of a half-completed atom smasher at Brookhaven National Laboratory in favor of a more powerful, $2-billion accelerator. Story on Page 5.

Amateur boxing ought to be eliminated, says the American Medical Association, while other experts say the sport could simply be made safer. Story on Page 7.

Teachers of courses other than freshman composition are trying to help their students learn to write. Story on Page 11.

Colleges might be persuaded to lower tuition if students had to foot the bill, according to an article in the latest issue of *Washington Monthly*. See "Journals" column on Page 19.

Chilean students took part in nationwide demonstrations against the military government of Augusto Pinochet. Story on Page 9.

China has awarded doctorates to Chinese students taught by Chinese professors for the first time since the Communists came to power. Story on Page 9.

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HAND-OFF TO THE HIGH COURT

Four Groups May Vie for TV Rights if Justice Turns Down NCAA's Plea

By N. SCOTT VANCE

The battle over televising college football grew even more chaotic last week as a federal appeals court refused to issue a stay of its order nullifying the National Collegiate Athletic Association's $281.1-million in contracts with the broadcasting networks.

The N.C.A.A. made an emergency request to U.S. Supreme Court Justice Byron White that he issue the stay. Unless the request is granted—which many observers deem unlikely—new television contracts will have to be negotiated for the forthcoming college football season.

Four groups of university officials, some with overlapping memberships, appeared to be in the running for the privilege of doing the negotiating.

The day after the U.S. Court of Appeals for the Tenth Circuit denied the N.C.A.A.'s request for a stay, a five-member *ad hoc* committee of university athletic directors began a campaign to urge institutions to stick by the terms of the fallen N.C.A.A. contracts, even though the courts have said they are no longer required to do so.

Meanwhile, the board of directors of the 60-member College Football Association scheduled a meeting of its members for August 2 in Atlanta, at which C.F.A. institutions will vote on whether to carry out a plan for marketing their games to broadcasters. The plan differs significantly from the old N.C.A.A. system.

In addition, the N.C.A.A.'s football television committee meets this week, and members said they would attempt to forge a new plan for televising football that would be acceptable to the courts.

A fourth group of officials, many from universities in the Pacific-10 Conference, has discussed negotiating a nationwide TV contract that would be modeled after the old N.C.A.A. contracts. But as of last week, the group, referred to as "the coalition," had taken no action toward doing so.

Letters to 104 Institutions

Of the four groups, the C.F.A. and the *ad hoc* committee appeared to be the front runners in the drive to negotiate contracts.

The *ad hoc* committee, headed by Hugh Hindman, athletic director at Ohio State University, last week sent letters to chief executive officers and athletic directors at the 104 institutions in the N.C.A.A.'s Division I-A, which is reserved for institutions with the most prestigious football programs.

The letters, accompanied by consent forms, asked the officials to agree to abide by the terms of the stricken N.C.A.A. con-

Continued on Page 8, Column 1

U.S. Suit Seeks Desegregation of Ala. Colleges

Action is first of its kind by Reagan Administration

By CHARLES S. FARRELL

WASHINGTON

In an effort to force Alabama to desegregate its public colleges and universities, the Justice Department last week sued the state.

The suit, the third filed by the department to desegregate a state system of higher education, was the first such action by the Reagan Administration.

Assistant Attorney General William B. Reynolds, head of the department's civil-rights division, said the suit, filed in the U.S. District Court in Birmingham, had come after more than a year of unsuccessful negotiations with Alabama.

"Since the negotiations have not resulted in a settlement at this time, we feel it is necessary to file a lawsuit," Mr. Reynolds said. "There remain sufficient obstacles to concluding a detailed, comprehensive settlement to require commencement of this action."

He added, "By filing this suit, however, we certainly do not intend to discourage further negotiations or suggest that the set-

Continued on Page 4, Column 1

Vienna Conferees Hit Political Abuse of Psychiatry

By VERA RICH

VIENNA

The political abuse of psychiatry and the wider issue of professional ethics for psychiatrists dominated the agenda at the seventh World Congress on Psychiatry, which opened here last week.

The congress was organized by the World Psychiatric Association, which at a meeting just before the congress began, "readopted" the 1977 "Hawaii declaration" that calls for ethical guidelines to prevent the "misuse of psychiatric concepts, knowledge, and technology."

The Soviet Union, which has been widely criticized for using psychiatric methods to suppress political dissent, was not represented at the congress here. The Russian psychiatric association withdrew from the W.P.A. last January to forestall moves to expel it. Resolutions calling for the expulsion of the Soviet group had been proposed by several national psychiatric bodies, including the American Psychiatric Association.

Delegates to the W.P.A.'s congress noted "with regret" the Soviet resignation and overwhelmingly endorsed a resolution from Britain's Royal College of Psychiatrists that said the Russians would be wel-

Continued on Page 10, Column 1

Competence of New Teachers Improving, Faculty Quality Up, Survey Finds

By BEVERLY T. WATKINS

The overall quality of faculty members is improving at many colleges and universities, a new survey conducted for *The Chronicle* has found.

More than 40 per cent of the institutions participating in the survey reported that the new faculty members they hired for the 1981-82 academic year were more competent than those hired a year earlier.

About 45 per cent of the colleges and universities also said the performance of all faculty members had improved over the same period, with professors showing an increased interest in teaching, a greater willingness to innovate, and a deeper concern for the academic needs of students.

Improvement in faculty quality could be a result in part of the tighter job market, according to some observers.

"In the last few years the colleges have been in a no-growth situation, but Ph.D.'s are still coming out of the universities," says Allan W. Ostar, president of the American Association of State Colleges

Continued on Page 14, Column 1

Soviet Jazz: Red and Hot

The history of jazz in the U.S.S.R. is a story of the swings in the official mood—from utter derision of the music to outright enthusiasm for it—and of its continuing and widespread popularity with large numbers of Soviet citizens.

See the "Publishing" section on Page 17.

JACKET ILLUSTRATION BY JEAN-JACQUES SEMPÉ FOR "RED AND HOT"

CHRONICLE SURVEY

Views of Chief Academic Officers on Faculty Quality and Performance

Faculty Working Conditions

	Increased	No change	Decreased
Secretarial and related assistance			
Public research universities	3.8%	53.8%	38.5%
Private research universities	0.0%	87.5%	12.5%
Public comprehensive colleges*	18.2%	51.5%	30.3%
Private comprehensive colleges*	24.2%	75.8%	0.0%
Private liberal-arts colleges	28.8%	69.2%	1.9%
Public 2-year institutions	16.7%	69.4%	13.9%
Private 2-year institutions	0.0%	66.7%	33.3%
All institutions	17.7%	67.0%	15.2%
Research support			
Public research universities	38.5%	46.2%	15.4%
Private research universities	37.5%	50.0%	12.5%
Public comprehensive colleges*	34.4%	53.1%	12.5%
Private comprehensive colleges*	28.1%	68.8%	3.1%
Private liberal-arts colleges	49.1%	49.1%	1.9%
Public 2-year institutions	9.1%	75.8%	12.1%
Private 2-year institutions	0.0%	83.3%	16.7%
All institutions	25.6%	63.9%	9.5%
Professional travel			
Public research universities	7.7%	30.8%	61.5%
Private research universities	0.0%	100.0%	0.0%
Public comprehensive colleges*	30.3%	33.3%	36.4%
Private comprehensive colleges*	36.4%	51.5%	12.1%
Private liberal-arts colleges	50.9%	41.5%	7.5%
Public 2-year institutions	22.9%	42.9%	34.3%
Private 2-year institutions	16.7%	33.3%	50.0%
All institutions	29.8%	42.3%	28.0%
Teaching load			
Public research universities	23.1%	76.9%	0.0%
Private research universities	0.0%	100.0%	0.0%
Public comprehensive colleges*	6.1%	90.9%	3.0%
Private comprehensive colleges*	6.1%	87.9%	6.1%
Private liberal-arts colleges	5.7%	90.6%	3.8%
Public 2-year institutions	16.7%	80.6%	2.8%
Private 2-year institutions	33.3%	66.7%	0.0%
All institutions	13.0%	84.2%	2.9%
Number of students			
Public research universities	61.5%	34.6%	3.8%
Private research universities	12.5%	87.5%	0.0%
Public comprehensive colleges*	36.4%	60.6%	3.0%
Private comprehensive colleges*	12.1%	66.7%	21.2%
Private liberal-arts colleges	13.5%	76.9%	9.6%
Public 2-year institutions	42.9%	57.1%	0.0%
Private 2-year institutions	16.7%	66.7%	16.7%
All institutions	29.6%	63.9%	6.5%
Work load in committee work, advising, etc.			
Public research universities	42.3%	57.7%	0.0%
Private research universities	0.0%	100.0%	0.0%
Public comprehensive colleges*	40.6%	56.2%	3.1%
Private comprehensive colleges*	27.3%	69.7%	3.0%
Private liberal-arts colleges	9.4%	90.6%	0.0%
Public 2-year institutions	25.0%	69.4%	5.6%
Private 2-year institutions	50.0%	50.0%	0.0%
All institutions	26.2%	71.1%	2.7%

Faculty Attitudes and Performance

	Increased	No change	Decreased
Concern for teaching			
Public research universities	45.8%	54.2%	0.0%
Private research universities	0.0%	100.0%	0.0%
Public comprehensive colleges*	27.3%	72.7%	0.0%
Private comprehensive colleges*	48.5%	51.5%	0.0%
Private liberal-arts colleges	28.3%	71.7%	0.0%
Public 2-year institutions	27.8%	69.4%	2.8%
Private 2-year institutions	83.3%	16.7%	0.0%
All institutions	35.0%	64.0%	1.0%
Concern for advising students			
Public research universities	33.3%	54.2%	8.3%
Private research universities	0.0%	100.00%	0.0%
Public comprehensive colleges*	66.7%	33.3%	0.0%
Private comprehensive colleges*	63.6%	36.4%	0.0%
Private liberal-arts colleges	43.4%	54.7%	1.9%
Public 2-year institutions	36.1%	58.3%	5.6%
Private 2-year institutions	66.7%	33.3%	0.0%
All institutions	46.5%	50.5%	2.8%
Willingness to innovate			
Public research universities	37.5%	45.8%	16.7%
Private research universities	25.0%	75.0%	0.0%
Public comprehensive colleges*	19.4%	67.7%	9.7%
Private comprehensive colleges*	45.5%	54.5%	0.0%
Private liberal-arts colleges	30.2%	66.0%	3.8%
Public 2-year institutions	38.9%	50.0%	5.6%
Private 2-year institutions	66.7%	33.3%	0.0%
All institutions	37.0%	55.6%	5.0%
Productivity in research and scholarship			
Public research universities	41.7%	50.0%	8.3%
Private research universities	37.5%	50.0%	12.5%
Public comprehensive colleges*	54.8%	41.9%	3.2%
Private comprehensive colleges*	48.5%	51.5%	0.0%
Private liberal-arts colleges	42.3%	57.7%	0.0%
Public 2-year institutions	8.6%	77.1%	2.9%
Private 2-year institutions	0.0%	100.0%	0.0%
All institutions	28.3%	65.4%	2.2%
Loyalty and commitment to the institution			
Public research universities	8.3%	70.8%	20.8%
Private research universities	12.5%	75.0%	12.5%
Public comprehensive colleges*	9.7%	80.6%	9.7%
Private comprehensive colleges*	24.2%	72.7%	0.0%
Private liberal-arts colleges	19.2%	73.1%	5.8%
Public 2-year institutions	16.7%	69.4%	13.9%
Private 2-year institutions	50.0%	50.0%	0.0%
All institutions	19.7%	70.5%	9.0%
Quality of faculty performance			
Public research universities	20.8%	79.2%	0.0%
Private research universities	50.0%	50.0%	0.0%
Public comprehensive colleges*	58.1%	38.7%	3.2%
Private comprehensive colleges*	45.5%	54.5%	0.0%
Private liberal-arts colleges	49.1%	49.1%	0.0%
Public 2-year institutions	30.6%	66.7%	2.8%
Private 2-year institutions	66.7%	33.3%	0.0%
All institutions	43.7%	54.4%	1.5%

Faculty Characteristics

	Increased	No change	Decreased
Percentage with Ph.D. or equivalent			
Public research universities	34.6%	61.5%	3.8%
Private research universities	0.0%	100.0%	0.0%
Public comprehensive colleges*	56.2%	40.6%	3.1%
Private comprehensive colleges*	51.5%	45.5%	3.0%
Private liberal-arts colleges	39.6%	58.5%	1.9%
Public 2-year institutions	38.9%	55.6%	5.6%
Private 2-year institutions	16.7%	66.7%	16.7%
All institutions	39.2%	55.9%	4.9%
Classes taught by full-time faculty members			
Public research universities	15.4%	65.4%	19.2%
Private research universities	0.0%	100.0%	0.0%
Public comprehensive colleges*	18.8%	65.6%	15.6%
Private comprehensive colleges*	15.2%	75.8%	9.1%
Private liberal-arts colleges	23.5%	68.6%	7.8%
Public 2-year institutions	22.2%	44.4%	33.3%
Private 2-year institutions	0.0%	83.3%	16.7%
All institutions	18.2%	62.3%	19.5%
Competence of new additions to faculty			
Public research universities	73.1%	26.9%	0.0%
Private research universities	62.5%	37.5%	0.0%
Public comprehensive colleges*	50.0%	46.9%	3.1%
Private comprehensive colleges*	54.5%	39.4%	6.1%
Private liberal-arts colleges	45.3%	52.8%	1.9%
Public 2-year institutions	36.1%	61.1%	2.8%
Private 2-year institutions	16.7%	83.3%	0.0%
All institutions	42.6%	54.9%	2.5%

* Institutions with more than 1,500 students, a liberal-arts program, and at least one professional program.

Note: Survey data are based on responses from a stratified random sample of 150 public and 150 private institutions. The approximate response rate was 75 per cent. "Don't know" responses are not included, so percentages may not total 100. Technical inquiries about the survey design and sampling techniques should be addressed to John Minter Associates, P.O. Box 107, Boulder, Colo. 80306.

SOURCE: SURVEY FOR THE CHRONICLE BY JOHN MINTER ASSOCIATES

Quality of Faculty Members

Continued from Page 1

and Universities. "As faculty members have retired or left, the competition for vacancies has been intense. We can get the pick of the crop."

At the same time, Mr. Ostar notes, "some faculty members are staying longer, not retiring as they used to, so the colleges are not filling new positions so often."

Now that some institutions are reviewing the performance of all faculty members, including those with tenure, on a regular basis, Mr. Ostar says, professors may be paying more attention "to demonstrating continuing scholarly performance."

He speculates that the lack of job mobility could also have "a psychological effect on faculty performance," prompting faculty members "to perform better where they are."

No Change at 55 Pct.

About 55 per cent of the institutions in the survey reported that the quality of new faculty members and the overall performance of all professors had not changed.

The *Chronicle* survey, which was based on a stratified random sample of 300 public and private two-year and four-year colleges and universities, compared the attitudes and performance of faculty members in 1981-82 with those a year earlier. The information in the survey, which was conducted for *The Chronicle* by John Minter Associates, was provided by chief academic officers at the institutions.

Large majorities of both public and private institutions reported that they were hiring new faculty members of higher quality than in the year before. For example, more than 73 per cent of public and more than 62 per cent of private research universities indicated that their new faculty members were more competent. About half of the public and private comprehensive colleges reported the same thing.

Almost 40 per cent of the institutions said the percentage of faculty members with doctoral degrees or the equivalent had increased.

On the average, 35 per cent of all institutions said their faculty members had shown an increased interest in teaching, while 46 per cent reported that professors were more concerned about advising students.

The private undergraduate institutions reported the greatest changes in the attitudes of their faculty members. More than 48 per cent of private comprehensive colleges, for example, found that faculty members were devoting more attention to teaching, while almost 64 per cent said professors were more concerned about student advising. About 83 per cent of the private two-year colleges reported greater faculty concern for teaching, while almost 67 per cent said faculty members were more involved in advising students.

Support for Research

About 25 per cent of all higher-education institutions said support for research had increased in 1981-82. Almost 40 per cent of both public and private research universities said they had received more support. However, about 65 per cent of all institutions said support had remained about the same.

A majority of all institutions indicated that faculty working conditions had not changed over the two-year period. In general, professors had about the same numbers of students in their classes and were spending about the same amount of time teaching.

The time they devoted to committee work and other institutional activities was also unchanged.

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News Summary

Articles on inside pages

Better times are ahead for higher education, according to state legislators and educators at the annual meeting of the Education Commission of the States. Story on Page 6.

College costs in 1983-84 will be about 9 per cent higher at public institutions and 10 per cent higher at private institutions than they were the previous year. Story on Page 6.

September 1 is the new deadline for colleges to comply with rules withholding federal student aid from young men who have not registered for the draft. Story on Page 7.

Faculty members in most disciplines receive higher pay at public colleges than they do at private institutions. Story on Page 15.

A proposal that the I.R.S. be barred temporarily from collecting taxes on low-cost faculty housing has been accepted by a House-Senate committee. Story on Page 7.

The reputation of the University of Nevada at Las Vegas as a national basketball power has come at high cost: financial deficits and questions about the university's commitment to education. Story on Page 11.

Competition between colleges and private businesses—in activities ranging from selling books to fitting hearing aids—appears to be on the rise. Story on Page 5.

Academic tenure could be eliminated in British Columbia if the legislature passes two proposals now before it. Story on Page 13.

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TIAA Adopting Unisex Tables for Pensions

By CHERYL M. FIELDS

The Teachers Insurance and Annuity Association and the College Retirement Equities Fund plan to adopt unisex mortality tables for their pension and annuity plans by August 1.

The companies are believed to have already asked the New York State insurance commissioner to approve detailed mortality tables that would result in the payment of equal monthly benefits to women and men on all contributions to retirement plans made after that date. Payments based on contributions made before then would not be affected.

Result of High Court's Ruling

The Supreme Court ruled this month, in a case brought by a female employee of the Arizona state government, that the state had to begin offering plans to pay women the same monthly benefits as men receive for all contributions they make to pension plans after August 1.

The Court said plans that pay women lower retirement benefits than men constitute illegal sex discrimination. But to lessen the financial impact on employers and insurance companies, the Justices held that benefits derived from pension contributions made before August 1 could be calculated according to the existing plans.

The Justices sent back to appellate courts two cases challenging T.I.A.A.-C.R.E.F. plans at Long Island and Wayne State Universities that pay women lower benefits.

Following the Court's ruling, the companies said they interpreted the decision to mean that they would have to adopt merged-gender mortality tables that did not result in lower benefits for women, based on their average longer life expectancies than men. However, T.I.A.A.-C.R.E.F. also indicated then that they might wait until the U.S. Courts of Appeal for

Continued on Page 19, Column 1

Justice White Postpones Order that Would End NCAA's Control of College Football on Television

Supreme Court will decide in fall whether to review case

By N. SCOTT VANCE

WASHINGTON

Associate Justice Byron H. White of the Supreme Court last week restored order to a chaotic college sports world—at least for the time being—by blocking two lower-court rulings that would have stripped the National Collegiate Athletic Association of its control over televising football.

Justice White's stay of the rulings at least temporarily salvaged $281.1-million in contracts between television broadcasters and the N.C.A.A.

The stay was granted pending a decision by the full Supreme Court, when it reconvenes in October, whether to review the lower courts' decisions. If the Supreme Court decides to hear the case, the stay will continue until it issues a final decision.

If the court refuses to give the N.C.A.A. a hearing, the stay "will terminate automatically," Justice White said. That would nullify the N.C.A.A. contracts.

If that should occur during the college football season, institutions would be free to negotiate their own television contracts for their remaining games. The season opens on September 1 and ends on December 11.

The text of Justice White's order appears on Page 12.

Athletic directors at many institutions said last week that they would urge their colleagues to abide voluntarily by the terms of the N.C.A.A. contracts for the remainder of the season if the stay were to be lifted.

The lawsuit challenging the N.C.A.A.'s control over television was brought by the Universities of Georgia and Oklahoma. Two federal courts said the universities should have the opportunity to negotiate their own television contracts, which the N.C.A.A. has refused to let them do.

In a five-page order, Justice White said he had granted the stay because he agreed with the N.C.A.A. that the full Supreme Court would be likely to accept the case for review, and because many institutions would be hurt financially if the contracts were voided and new ones had to be drawn

Continued on Page 12, Column 3

Abuse of Computers Worries Colleges

By JUDITH AXLER TURNER

Computer crime has all the excitement of Robin Hood without the physical danger: Criminals with computers can steal millions of dollars by dialing into electronic funds-transfer networks; industrial spies can snitch copies of valuable blueprints without leaving a fingerprint on the file cabinet.

To colleges and universities, however, computer crime has often been seen as academic—a problem more for industry and government than for academe. But as computers proliferate in higher education, so do abuses of them—and so do questions about how the institutions should react.

Although the technology exists for someone on a campus to cause a computer hundreds of miles away to stop working ("crash" in computer terminology) or to

Continued on Page 18, Column 1

Swiss to Vote this Fall in Referendum Aimed at Banning All Vivisection

By DAVID DICKSON

GENEVA

Swiss voters will go to the polls next fall to decide whether their country should adopt a total ban on vivisection.

The action, which would severely limit the use of live animals in both private and public research laboratories, was initiated by a conservationist group known as *Helvetia Nostra*—"Our Switzerland" in Latin. It would take the form of a change in the country's constitution to forbid all "cruel experiments" on animals.

Already the organization has gathered more than 150,000 signatures on a national petition, more than the number required to force such a referendum.

Supporters of the initiative say more than 3.5 million experiments on animals are carried out in Switzerland each year—the highest per-capita number of such experiments in the West.

The proposed ban on "cruel experiments" has been strongly attacked by scientific groups and major pharmaceutical companies, which are some of Switzerland's most important sources of jobs and income. Several companies have warned that if the ban were adopted, they would move their research activities—and possibly their production facilities—elsewhere. They say Switzerland already has some of the strictest animal-welfare laws in Eu-

Continued on Page 14, Column 1

BEIRUT U. LEADER FREED

AMERICAN U. OF BEIRUT (1972 PHOTO)

David S. Dodge, the vice-president of the American U. of Beirut who was kidnaped a year ago, was released last week. See story on Page 13.

Better Economic Fortunes May Be in Store for Colleges, Education Commission Told

By KAREN J. WINKLER

DENVER

After a decade of gloomy economic news, there are signs that better times are ahead for higher education, according to speakers at the annual meeting of the Education Commission of the States here last week. The commission represents legislators and educators in 48 states.

"Until recently it has been the same story over and over: The states are in very serious fiscal condition. Now there is a difference. 1983 marks a turning point in many, many states," said Steven D. Gold, director of the Intergovernmental Finance Project of the National Conference of State Legislatures.

"The fiscal condition of the states is improving," Mr. Gold said.

Added Lyman A. Glenny, professor emeritus of higher education at the University of California at Berkeley, "In terms of the welfare of the students, I think we are well on our way to a really golden age." He said that "youth are going to be far better served by higher education in the future."

Until the last few months, Mr. Gold said, the fiscal condition of the states—which are assuming a greater and greater role in financing education—"was as bad as it has been at any time in the last half century."

Two factors have helped turn state budgets around in recent months, he said. First, "this year will go down in history as the biggest year for state tax increases" in the last 50 years. "Even if you take into account the growth of inflation and the growth of state spending, the tax increases will ease state budgets."

Second, Mr. Gold said, "the economy is improving. By the end of this year, it will be fairly clear that the improved economy has enhanced tax revenue for the states."

In 1982 only nine state legislatures raised sales and income taxes. But after the November elections that year, "it got hot and heavy" as other states turned to tax increases, Mr. Gold said. Thus far in 1983, 31 states have raised taxes. Of those, he said, 18 increased them by at least 5 per cent of their total revenues.

To date, he said, "the total tax increases have been for $8-billion. They are likely to get to $10-billion."

'Back in Shape'

States still face some continuing fiscal problems, Mr. Gold warned. "Spending is the other side of the coin. Despite the fact that states have raised taxes, most of them are still having fairly austere budgets."

He said that for several years, states had put off spending for maintenance and other needed services. "Now they have to get things back in shape."

Moreover, he added, "I suspect that taxpayers will be opposed to more tax increases. This year, they accepted them because it was fairly easy to make the case that states needed money. But, down the road, it will be much more difficult to raise taxes a second time."

Also, "it is inevitable that federal aid to states is going to continue to go down," he said.

"There is a ray of light on the horizon," Mr. Gold said. Because fewer people will be entering the work force in the future, unemployment will probably fall—by 4 or 5 per cent by 1990—and wages will go up, he predicted.

"The demographics are favorable" for a better economy and a better tax base for states, he said.

"People don't realize that there are some positive trends along with the negative. In the long run, there will be a lot of continuing problems, but there really is a ray of hope at the end of the tunnel—if you can just hang on until around 1990."

Mr. Glenny said that, for students, "the golden age is almost here." He cited several factors:

► The probable continuation of increases in student aid. "President Reagan wanted to cut student aid, and he got very few cuts. Student aid has survived very well. I don't see any possibility now that there will be cuts at the federal level," Mr. Glenny said. "Student aid has survived very well in the states."

► A growing consensus that quality education must be supported. "The pressures for improving education are on."

► The boost to higher education given by recent calls from business and industry for better-trained workers. "Technology requires higher levels of education to achieve mounting productivity," Mr. Glenny said.

► The age of computers, which will improve teaching. "Computers are the basis for major, radical change in colleges and universities," Mr. Glenny said. They will lead to "more direct communcation" between students and faculty members and to "more individualized instruction."

► The improvements generated by "cutback strategies" in higher education. Out of economic necessity, "we will forsake the weak programs and the weak institutions," Mr. Glenny said. "Then we will say, 'You are gone, thank goodness.' "

Charges of Bias at Wayne State University Pit President Against a Powerful Legislator

DETROIT

Charges of racial and sexual discrimination in hiring at Wayne State University here have pitted the institution's president against a powerful member of the state legislature.

David Adamany, president of the 29,000-student, inner-city university, called allegations of discrimination "wild and irresponsible." He said the university's lack of funds had made it difficult to recruit qualified women and members of minority groups for its faculty.

Mr. Adamany said the Michigan legislature—by cutting millions of dollars from university budgets in recent years—must share any blame for perceived problems in affirmative action.

"Those who are making these wild and irresponsible charges will bear the burden of proving them," he said.

His statements came at a hearing called by a five-member State Senate committee studying affirmative action in state government. Chairman David Holmes, Democrat of Detroit, challenged Mr. Adamany, saying, "I am one of those who made those wild and irresponsible charges, and I stand by them."

In a rebuttal to Mr. Adamany's statement, Mr. Holmes called for a "thorough investigation" of Wayne State's hiring in the past year, saying, "I don't think we are all talking about the same university."

'Institutional Racism'

A caucus of Wayne State's black faculty members and administrators recently charged that fewer than 6 per cent of the university's faculty members are black, even though 25 per cent of the university's students are black.

The caucus has threatened to sue over the lack of black faculty members, which it blames on "institutional racism."

Mr. Adamany did not quarrel with the figures but cited several reasons for the lack of female and black faculty members. Among them:

► State budget cuts that caused qualified blacks to shy away from Michigan colleges.

► The lack of competitive salaries at Wayne State.

► Layoffs that hit newer faculty members, many of whom are women or blacks.

► A general lack of hiring at the university.

Despite those statements, Mr. Holmes called for a full study of hiring at the university and said he might ask the Michigan Senate to act if problems persist. —GLEN MACNOW

Competition

Continued from Preceding Page

ing swimming-pool facilities to the general public and for renting rooms to the public at a campus conference center. It has also questioned Rensselaer Polytechnic Institute's deducting the full cost of running a field house that it sometimes rented for private use.

The Small Business Administration would like to see the I.R.S. do more. In its 1980 report, it said that "sharper definitions must be provided in the Internal Revenue Code or its accompanying regulations to distinguish between the private and the nonprofit sector. The task group recommends that the Internal Revenue Code be modified to remove inappropriate exemptions from unrelated business income such as 'research' performed by nonprofit institutions for government and all 'research' by universities."

"It's very delicate," says Mr. Hostetler. "No one is suggesting for a minute that colleges and universities do not have an important role to play in education and research. But the tax laws are out of date, and allow them to claim that too many things are related to their educational mission."

Looking Ahead to 1983-84

Private Colleges Will Charge 10 Pct. More; Public-College Costs to Increase 9 Pct.

WASHINGTON

The cost of attending college this year will be about 9 per cent higher at public institutions and 10 per cent higher at private institutions than it was in academic 1982-83, according to a new report from the American Council on Education.

Students attending public colleges and universities will have to pay an average of $4,618 for tuition and fees, room and board, and other expenses in 1983-84, the report said. Students at private institutions will have to pay $8,939, on the average, to cover the same expenses.

The cost projections are lower than those the council made in the fall of 1982, when it forecast a 12-per-cent increase in tuition and fees at public institutions and a 13-per-cent increase at private institutions for 1983-84.

The council estimates that the average cost of attending higher-education institutions this year will outpace the rate of inflation as determined by the Consumer Price Index, which is currently expected to increase at a rate of 4 to 5 per cent in 1983-84.

If that happens, said Cathy Henderson, a research associate at the council, colleges and universities will make up some of the financial ground they have lost since 1977.

"During this period," she said, "high inflation rates forced institutions to pay a larger share of their budgets for utility costs, defer expensive facility maintenance and renovation, and depress faculty and staff compensation below the real cost-of-living annual-increase levels."

As a result, many colleges and universities now need to make extensive and costly repairs to campus buildings and equipment and to increase salaries and fringe benefits for the campus work force, the report indicated.

The report, "College Costs: Recent Trends, Likely Future," will be available next month without charge from the American Council on Education, One Dupont Circle, Washington 20036.

—BEVERLY T. WATKINS

1 College in 5 Expects More Students to Return; 1 in 10 Expects Fewer

Admissions officers at about one in five colleges and universities have predicted that enrollments of returning students will be higher this fall than they were in fall, 1982, according to a new survey conducted for *The Chronicle*.

The survey also indicated that more than one in ten institutions expected fewer returning students, while slightly more than half anticipated no change this fall. The remaining institutions, for the most part, were still uncertain about the number of returnees.

The survey was based on a stratified random sample of 391 four-year colleges and universities with enrollments of more than 500 students. The projections were based on credit-hour enrollment, not head count, and did not include freshmen.

About a quarter of the colleges and universities in the Southeast anticipated more returning students this fall, while closer to a fifth of the institutions in the Great Lakes and Plains region and the West and Southwest were expecting increases.

About 15 per cent of institutions in the Northeast and Mid-Atlantic region anticipated more returning students.

The survey was conducted for *The Chronicle* by John Minter Associates, a higher-education research organization in Boulder, Colo.

Trends in Returning Students

	Higher	Lower	No change
Private colleges and universities			
Research universities	23.8%	9.5%	42.9%
Comprehensive colleges *	14.3%	15.5%	54.8%
Liberal arts	23.2%	11.6%	55.7%
All private institutions	20.0%	12.5%	54.5%
Public colleges and universities			
Research universities	14.7%	11.8%	48.5%
Comprehensive colleges *	25.3%	12.0%	49.3%
All public institutions	22.7%	11.9%	49.1%
Regions			
Northeast and Mid-Atlantic	16.3%	7.0%	59.9%
Great Lakes and Plains	21.9%	19.2%	46.3%
Southeast	26.4%	11.2%	52.8%
West and Southwest	22.7%	7.7%	53.6%
Enrollment			
500 – 2,499	22.9%	11.7%	54.5%
2,500 – 4,999	23.5%	13.0%	47.7%
5,000 – 9,999	17.1%	10.1%	53.8%
10,000 – 19,999	14.8%	19.0%	60.2%
20,000 and over	26.8%	10.9%	30.0%
All institutions	21.5%	12.3%	52.6%

* Institutions with more than 1,500 students, a liberal-arts program, and at least one professional program

Note: Survey data are from a stratified random sample of 391 four-year colleges and universities, excluding those with enrollment under 500. "Don't know" and "No response" are not included in this table, so percentages will not total 100.

SOURCE: SURVEY FOR THE CHRONICLE BY JOHN MINTER ASSOCIATES

FACT-FILE

Average Faculty Salaries in 1982-83 by Discipline and Rank

	227 Public Institutions						299 Private Institutions					
	Professor	Associate professor	Assistant professor	New assistant professor	Instructor	All ranks	Professor	Associate professor	Assistant professor	New assistant professor	Instructor	All ranks
Agriculture	$31,986	$25,539	$22,748	$22,125	$17,040	$26,261	—	—	$19,816	—	$14,427	$18,972
Architecture	33,839	25,865	24,538	—	—	28,704	$34,208	$27,851	20,499	$20,700	—	27,263
Environmental design	—	—	—	—	—	—	26,262	28,520	—	—	—	26,077
Area studies	31,481	27,228	21,662	—	19,083	25,612	38,653	27,382	24,120	—	—	30,437
Biological sciences	32,515	25,859	21,106	19,849	16,842	27,691	30,987	23,681	19,737	18,058	15,393	24,864
Botany	29,935	25,479	24,571	—	—	27,292	31,066	22,926	—	—	—	24,994
Zoology	31,624	24,292	20,063	—	—	26,590	27,403	22,918	17,957	—	—	23,185
Business and management	35,134	28,886	24,721	24,244	18,510	27,848	36,690	28,551	24,275	23,422	18,034	28,186
Accounting	35,958	29,740	24,760	24,845	19,033	27,867	37,379	29,603	24,026	21,758	18,212	27,414
Business economics	34,081	27,461	23,123	23,134	18,167	27,394	37,465	27,777	23,456	22,848	18,882	27,788
Business management and administration	34,211	28,519	23,772	23,815	18,541	27,215	36,390	28,834	23,684	23,838	18,059	27,338
Insurance	38,694	29,505	24,481	—	—	29,872	—	—	—	—	—	32,582
Labor and industrial relations	—	—	—	—	—	28,385	—	—	—	—	—	33,686
Marketing and purchasing	36,502	30,485	25,346	—	18,566	29,792	—	—	—	—	—	28,225
Personnel management	—	—	—	—	—	26,740	—	—	—	—	—	27,035
Real estate	36,823	26,641	25,889	—	—	30,752	—	—	—	—	—	—
Secretarial studies	32,257	26,644	21,560	20,380	16,776	24,823	—	21,939	17,692	—	13,926	18,273
Communications	31,670	25,379	20,734	19,437	16,414	23,845	31,064	25,404	19,924	18,079	14,923	22,481
Communication media	32,333	26,374	21,543	—	16,420	24,816	34,619	26,692	20,672	—	17,363	23,736
Journalism (printed media)	32,510	26,416	21,938	20,808	18,752	25,017	31,269	27,837	19,424	18,532	16,434	23,926
Computer and information science	33,851	28,645	24,271	23,592	18,853	26,177	36,483	28,439	23,394	22,399	18,512	26,200
Education	32,031	26,391	21,690	19,976	17,097	26,624	29,693	23,469	19,733	18,103	16,143	23,501
Curriculum and instruction	32,621	26,652	22,058	20,843	17,622	27,062	36,102	28,806	20,924	—	—	28,586
Elementary education	31,773	26,588	21,947	19,260	17,827	27,284	25,941	21,945	17,894	—	14,292	20,525
Higher education	33,522	26,641	20,877	—	—	30,374	—	—	—	—	—	25,436
Reading education	30,950	24,940	21,315	—	18,839	25,651	32,299	26,128	17,283	—	14,043	22,186
Secondary education	30,950	26,120	21,960	—	—	27,653	26,911	22,251	18,154	—	—	22,282
Special education	31,915	25,837	21,372	20,132	18,166	25,767	29,912	22,505	17,819	—	16,100	21,204
Student personnel	31,943	25,664	21,648	20,278	—	28,069	30,769	25,092	21,605	—	—	25,300
Vocational and technical education	31,903	26,588	22,162	20,637	18,338	26,335	—	—	—	—	—	20,447
Engineering	35,269	28,584	24,504	24,794	20,344	29,722	41,179	29,923	26,860	26,533	20,621	33,806
Fine and applied arts	30,383	24,327	20,218	18,849	17,184	24,545	28,871	23,187	18,898	18,997	15,807	22,421
Applied design	33,737	27,000	22,196	—	17,314	26,979	26,662	23,028	18,466	—	—	21,652
Art	30,642	24,623	20,017	19,046	16,957	24,702	28,996	22,032	18,025	17,250	14,722	22,239
Dance	—	25,406	19,888	—	15,977	21,887	29,054	21,360	18,816	—	—	20,732
Dramatic arts	32,802	25,587	19,974	18,901	17,486	24,783	29,235	23,957	18,754	18,691	14,761	21,280
Music (liberal-arts program)	31,577	25,309	21,092	19,667	17,386	25,358	28,330	22,563	18,623	18,148	15,495	22,155
Foreign languages	31,876	25,581	21,297	18,544	16,932	25,855	31,445	24,343	19,635	16,941	15,491	24,016
Health professions	31,428	26,553	21,711	21,083	19,016	23,924	51,477	40,869	31,283	36,406	22,044	37,093
Hospital and health-care administration	31,363	27,517	19,573	—	—	24,058	—	30,039	23,378	—	—	26,680
Nursing (baccalaureate and higher programs)	31,625	25,597	21,405	20,285	17,979	21,864	29,334	23,716	19,082	18,726	15,742	19,588
Speech pathology and audiology	32,028	25,932	21,447	—	18,028	25,512	33,398	24,952	19,832	20,189	16,633	23,307
Home economics	32,269	26,076	21,445	20,812	17,337	23,830	27,809	22,293	18,423	—	15,002	19,610
Interdisciplinary studies	30,075	26,040	20,758	—	—	25,289	30,332	23,038	19,348	—	16,573	22,613
Letters	31,631	25,215	20,821	19,230	15,746	25,123	30,737	24,136	19,492	17,783	14,785	24,778
English	32,162	25,374	21,006	18,625	15,742	25,335	30,917	23,591	19,001	17,061	16,327	23,985
Library science	32,760	26,150	21,373	20,235	17,261	23,952	32,876	25,703	18,796	—	14,912	23,204
Mathematics	32,914	26,719	22,036	21,341	16,369	26,323	33,970	24,967	20,612	20,641	16,191	25,621
Physical sciences:												
Chemistry	32,653	26,250	21,640	19,938	16,747	28,511	32,127	24,188	19,698	18,975	14,794	26,648
Geology	32,855	26,401	21,913	21,232	16,433	27,908	36,502	26,519	21,496	21,293	—	28,729
Physical science	31,620	26,005	21,755	20,332	17,276	27,576	39,245	27,866	22,900	—	15,617	32,059
Physics	33,588	26,809	21,944	21,416	17,404	29,090	35,521	26,430	21,184	20,606	16,090	29,618
Psychology	32,957	26,004	20,767	19,457	17,036	27,587	31,698	24,612	19,592	19,061	15,701	25,264
Public affairs and services	31,868	26,200	21,856	20,930	18,137	24,819	—	26,090	20,318	—	—	23,807
Social sciences	31,917	25,338	21,208	19,790	17,850	26,135	35,899	24,645	20,519	18,508	15,516	25,636
Anthropology	32,797	26,232	20,682	—	17,350	27,381	36,498	25,909	20,354	—	—	27,617
Geography	32,801	26,252	21,753	21,879	17,609	27,568	35,248	26,341	21,231	—	—	27,804
History	32,307	25,537	21,430	19,367	16,657	28,277	30,895	24,751	19,307	18,629	15,264	26,102
International relations	—	—	—	—	—	25,795	37,188	29,203	23,552	—	—	33,076
Political science and government	32,589	25,830	20,874	19,337	17,210	27,016	32,413	25,631	20,195	18,552	17,389	25,928
Sociology	33,075	26,048	20,961	18,705	17,296	26,134	32,514	24,119	19,312	18,841	15,772	24,221
Theology	32,551	—	—	—	—	29,218	28,807	23,757	19,402	18,642	15,700	23,795
All disciplines	**$32,632**	**$26,334**	**$21,818**	**$21,145**	**$17,519**	**$26,475**	**$33,391**	**$25,718**	**$21,033**	**$20,723**	**$16,474**	**$25,697**

— No data or fewer than 10 positions.

SOURCE: COLLEGE AND UNIVERSITY PERSONNEL ASSOCIATION

Helping Female Students

Continued from Page 15

aimed at both male and female faculty members, so men don't feel singled out for criticism, she says.

"We're saying, 'Look, we all do this,' " says Ms. Sandler. "We all need to improve."

Some teachers who evaluated their behavior after reading the paper say they discovered that they were slighting not only women, but also working-class students or those they judged to be intellectually weak, say Ms. Hall and Ms. Sandler.

Classroom Climate suggests that subtle discrimination against women in the classroom stems from a slowly changing attitude that higher education is essentially a masculine enterprise. Faculty members may openly accept female students while unconsciously sending them damaging messages.

"One response we got was, 'I know I do some of those things—it just didn't occur to me it was discriminatory behavior,' " says Delivee L. Wright, director of the Teaching and Learning Center at the University of Nebraska at Lincoln, which sponsored workshops on the paper last winter.

Time to Answer Questions

Some participants said the paper had made them realize that they did not allow as much time for women to respond to questions as they did men, Ms. Wright says.

"They felt they didn't want to embarrass a young woman by putting her on the spot," Ms. Wright explains. "Then it occurred to them maybe they weren't giving them enough thinking time to answer the question."

Drawing on studies of classroom behavior and first-person reports from students, *Classroom Climate* says teachers discourage the full intellectual growth of female students with actions such as these:

► Making eye contact more often with men than with women.

► Showing more interest in men's comments than in women's—such as by assuming an attentive posture when men speak but looking distracted when women speak, by regularly sitting or standing near male students, or by nodding and gesturing more often in response to men's statements.

► Addressing the class as if no women were present. ("Suppose your wife . . . ," or "When you were a boy . . . .")

► Interrupting women more often than men, or letting students do so.

► Favoring men in choosing student assistants.

► Allowing women to be physically "squeezed out" from viewing a laboratory assignment or a demonstration.

Faculty members should be sensitive to research that highlights differences in male and female speech patterns, *Classroom Climate* suggests.

As an example, it says that women more than men speak in a high pitch with a questioning intonation. Women also tend to use deferential phrases ("This is probably not important") and "tag" questions ("Don't you think?"), the paper adds.

Yet in a college or university setting, it adds, assertive speech and competitive interchanges are often highly valued—with the result that female students may be placed at a disadvantage in the classroom.

Taping Recommended

The paper recommends that faculty members evaluate their classroom behavior by using audiotapes or videotapes, asking colleagues or students to observe them, and including questions about the classroom climate on evaluation forms given to students.

The Classroom Climate: A Chilly One for Women? is available for $3 from the Project on the Status and Education of Women, Association of American Colleges, 1818 R Street, N.W., Washington 20009.

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News Summary

Articles on inside pages

National Public Radio and the Corporation for Public Broadcasting have agreed on terms for a loan to bail out N.P.R. Story on Page 2.

Tuition and fees at public four-year colleges and universities will average $1,105 in 1983-84; private colleges next year will cost an average of $4,627. Story and Fact-File on Pages 5-10.

David S. Dodge, the American University of Beirut official who was released by kidnapers last month, refused to disclose details of his yearlong ordeal. Story on Page 18.

Student leaders intend to concentrate their 1984 electoral efforts on Congressional races in an attempt to increase their impact on national politics. Story on Page 11.

Many colleges plan to offer "incentive" scholarships to encourage students to teach mathematics or science in the public schools. Story on Page 13.

Beginning this week, women's athletic programs will be subject to the full enforcement of N.C.A.A. rules governing recruitment and related activities. Story on Page 15.

Faculty positions increased at some colleges and universities during 1982-83, a survey for *The Chronicle* has found. Story on Page 19.

Fashions in womanly beauty last longer than the latest dress styles—but not much longer, according to the author of a new historical study, *American Beauty*. Story on Page 21.

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Cal. Governor Cuts College Aid by $381-Million

One official calls budget 'worst in modern times'

By **JACK McCURDY**

SACRAMENTO, CAL.

Gov. George Deukmejian of California has slashed $381-million from the $3.7-billion approved by the state legislature for higher education in 1983-84.

Unless the legislature overrides his vetoes of specific allocations for the state's three higher-education systems—an action that political observers consider unlikely—California will be faced with what Patrick M. Callan, executive director of the California Postsecondary Education Commission, described as "the worst budget for higher education in modern times."

As a result of the cuts, the California Community College system is expected to impose, for the first time in its history, a state-mandated student fee of up to $100. The cuts would also result in higher fees at the 9 campuses of the University of California and the 19 campuses of the California State University system.

Specifically, Mr. Deukmejian cut:

► $73-million from the $1.1-billion approved by the legislature for the University of California system.

► $85-million from the $1-billion approved for the California State University system.

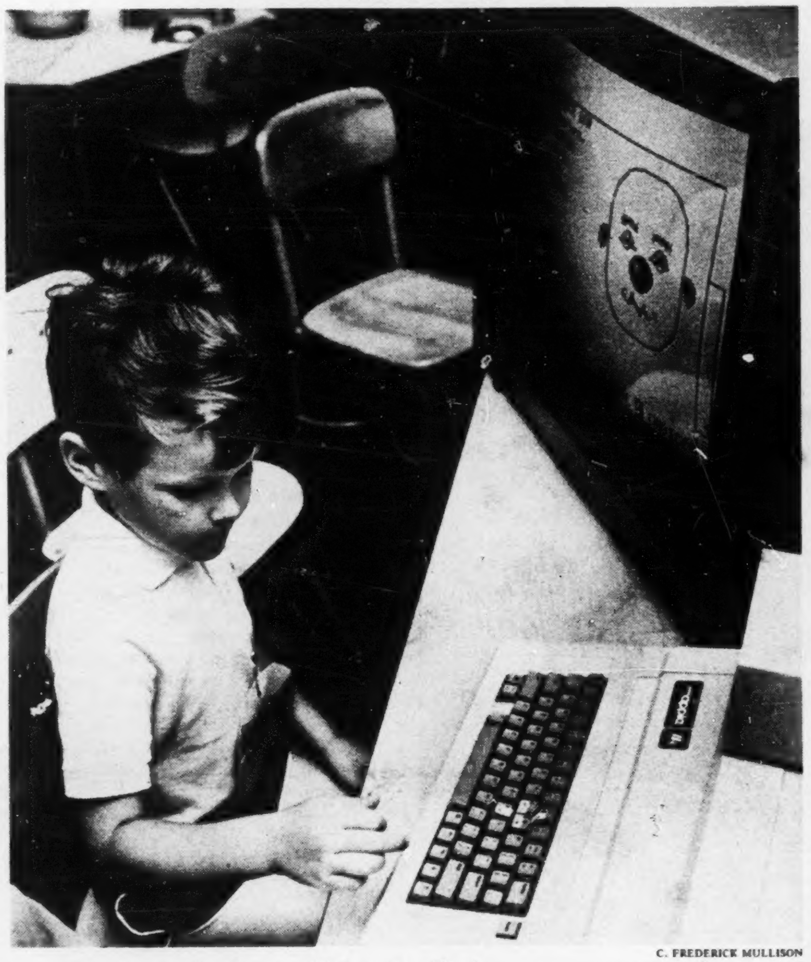
► $223-million from the $1.6-billion approved for the state's 107 two-year colleges.

Legislators are scheduled to reconvene August 15 to decide whether to approve the student fees at the community colleges or to allow the institutions to suffer the cut. Democratic lawmakers have assailed Mr. Deukmejian, a Republican, over the cuts, but political observers do not believe his opponents have the votes to override his actions.

Opponents of the measure have charged

Continued on Page 10, Column 4

CHILD'S PLAY



C. FREDERICK MULLISON

A preschooler at a University of Delaware summer camp shows none of the fear of computers that adults sometimes do. See story on Page 12.

Guaranteed Loans to Rise 25 Pct. to $7.7-Billion, U.S. Now Says

By **JANET HOOK**

WASHINGTON

Borrowing under the federal Guaranteed Student Loan program will increase by almost 25 per cent this year, according to new estimates by the Office of Management and Budget. The projected increase in the amount borrowed in fiscal 1983, which ends on September 30, is significantly more than the 10 per cent predicted by the O.M.B. in earlier estimates.

The increase would reverse the sharp decline in borrowing registered in fiscal 1982, following the imposition of tighter eligibility standards.

In a report revising President Reagan's budget proposals to reflect changing economic conditions, the O.M.B. has predicted that borrowing will increase from $6.2-billion in fiscal 1982 to $7.7-billion in fiscal 1983—about the same amount as was borrowed in fiscal 1981. About half the guaranteed loans made in fiscal 1983 will be used by students in the 1983-84 academic year.

Some student-aid analysts believe that the amount borrowed will not increase as much as the Administration is projecting, and that trends will vary widely from state to state. In New York and Massachusetts, for example, student-loan officials expect the borrowing to increase only about 10 per cent this year. The Congressional

Continued on Page 14, Column 1

UNIVERSITY TARGET OF TERRORIST ATTACK

UPI

An ambulance transports Arab youths wounded in an assault on Hebron University by unidentified masked gunmen. See story on Page 18.

Tuition and Student Fees at Over 2,600 Colleges and Universities

Following are the tuition and fees charged at more than 2,600 colleges, universities, and other postsecondary institutions for the 1982-83 and 1983-84 academic years, including additional tuition, for 1983-84, that many institutions charge to out-of-state students.

The figures were compiled by the College Scholarship Service, the financial-aid division of the College Board.

A blank space indicates that an institution will have no such charge. An asterisk (*) indicates that current figures are not available. Institutions that did not report tuition and fees for 1983-84 have been omitted.

The College Scholarship Service's complete report, *The College Cost Book, 1983-84*, will be available September 1. Copies can be ordered, at $9.95 each, from College Board Publications, Dept. A-30, Box 886, New York 10101.

Student Fees Up 11 Pct. at Private Institutions, 12 Pct. on Public Campuses, College Board Says

NEW YORK

Increases in tuition costs will average 12 per cent at public four-year colleges and universities this fall and 11 per cent at private institutions, the College Scholarship Service announced last week.

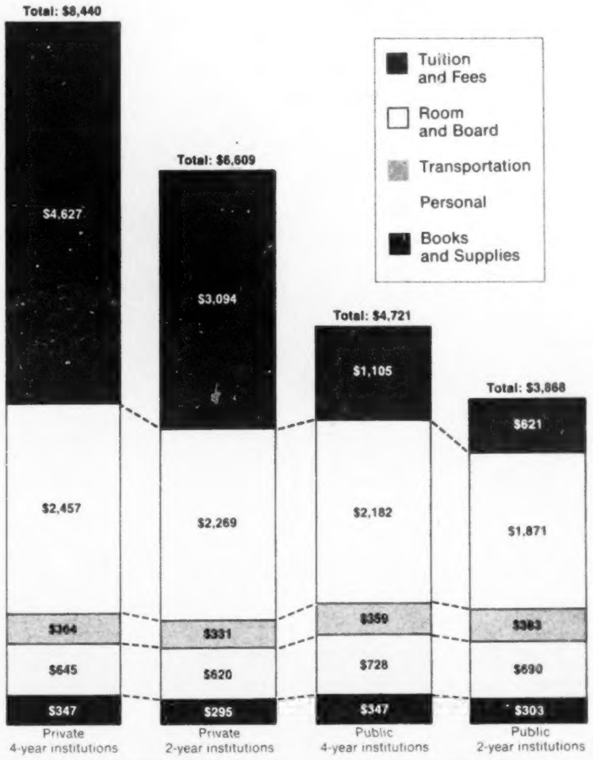
The cost of living, as measured by the government's Consumer Price Index, rose 2.6 per cent during the 12 months ending June 30.

According to the scholarship service, the financial-aid division of the College Board, tuition and student fees at four-year public institutions will average $1,105 for academic 1983-84, compared with $979 last year. At private four-year colleges, they will average $4,627, up from $4,021 last year.

For public two-year institutions, the same costs will average $621, an increase of 9 per cent from the previous year. For private two-year colleges, the average will be $3,094, an increase of 11 per cent from 1982-83.

Tuition and fees for out-of-state students attending public institutions will average $1,472 more than costs for state residents at four-year colleges and $1,198 more at two-year institutions this fall.

The estimates are based on information provided by more than 2,600 public and private institutions of higher education that participated in the College Board's annual survey of college costs for academic 1983-84. In general, only tuition increases announced before June 1 were included in the estimates.



CHRONICLE CHART BY PETER H. STAFFORD

SOURCE: COLLEGE BOARD

The survey indicated that students who live on campus at four-year public colleges and universities will pay average total costs—tuition and fees, room and board, and other expenses—of $4,721 this year, up 7 per cent from last year. Students living on campus at private institutions will pay an average of $8,440, an increase of 11 per cent over 1982-83.

Students who commute will pay between $900 and $1,100 less than campus residents.

	1982-83 Tuition and fees	1983-84 Tuition and fees	1983-84 Added out-of-state tuition
ALABAMA			
Alabama Christian C	2,880	2,880	
Alabama St U	600	780	780
Athens St C	900	1,080	1,080
Auburn U	*	990	1,290
Auburn U at Montgomery	*	795	1,035
Concordia C	*	2,060	
Gadsden Business C	*	2,495	
Herzing Inst	*	4,520	
Huntingdon C	2,700	2,800	
International Bible C	*	1,740	
Jacksonville St U	700	700	350
Judson C	2,330	2,530	
Marion Military Inst	3,527	3,835	
Miles C	2,400	3,000	
Mobile C	*	2,590	
Oakwood C	3,753	3,966	
Samford U	3,090	3,424	96
Selma U	*	3,285	
Spring Hill C	4,500	5,050	
Stillman C	2,180	2,400	
Talladega C	2,967	2,967	
Troy St U		1,005	472
Dothan-Ft Rucker	*	1,005	473
Montgomery	*	900	472
Tuscaloosa St Tech C	*	500	
Tuskegee Inst	2,750	3,000	
Twentieth Century C	*	2,720	
U of Alabama	*	1,150	1,300
Birmingham	*	1,431	1,386
Huntsville	*	1,167	1,167
U of Montevallo	918	1,090	600
U of N Alabama	870	967	400
U of S Alabama	*	1,311	600
Walker C	1,126	1,252	
ALASKA			
Alaska Bible C	1,202	1,444	
Alaska Pacific U	3,000	3,190	
Sheldon Jackson C	3,160	3,220	
U of Alaska, Anchorage	*	648	960
Fairbanks	*	788	960
Juneau	*	624	960
Kenai Peninsula CC	*	600	960
Ketchikan CC	*	600	960
Kuskokwim CC	*	600	960
Matanuska-Susitna CC	*	612	960
Northwest CC	*	612	960
Sitka CC	*	600	960
Tanana Valley CC	*	788	450
ARIZONA			
Arizona C of Bible	1,870	2,230	
Arizona St U	710	850	2,665
Arizona Western C	390	400	2,784
Biosystems Inst	3,465	3,465	
Central Arizona C	*	360	2,496
Cochise C	*	450	2,130
C of Ganado	1,452	1,452	
Eastern Arizona C	300	330	2,350
Embry-Riddle Aero U Prescott	2,930	2,930	
Glendale CC	*	420	2,250
Grand Canyon C	2,483	2,681	
Maricopa Tech CC	264	420	2,250
Mesa CC	*	420	2,250
Mohave CC	206	270	2,520
Navajo CC	*	730	
Northern Arizona U	710	850	2,145
Northland Pioneer C	100	100	1,600
Phoenix C	*	420	2,250
Phoenix Sch of Welding	*	4,300	
Pima CC	308	450	2,040
Prescott C	3,575	3,875	
Rio Salado C	264	420	2,250
Ron Bailie Sch of Broadcasting	*	5,590	
Scottsdale CC	172	420	2,250
South Mountain CC	264	420	2,250
SW Baptist Bible C	2,126	2,300	
U of Arizona	710	850	2,665
U of Phoenix	3,500	3,650	
Western Internat'l U	1,500	1,525	
Yavapai C	430	408	3,444
ARKANSAS			
Arkansas C	3,300	3,535	
Arkansas St U	730	760	600
Beebe Branch	568	600	220
Arkansas Tech U	750	840	780
Black River Voc-Tech Sch	*	300	
Central Baptist C	*	800	
ARKANSAS—Continued			
C of the Ozarks	1,300	1,515	
Crowley's Ridge C	1,590	1,725	
East Arkansas CC	432	432	336
Garland County CC	432	480	1,032
Harding U	2,831	2,943	
Henderson St U	720	810	790
Hendrix C	3,275	3,716	
John Brown U	2,500	2,700	
North Arkansas CC	432	480	384
Ouachita Baptist U	*	2,750	
Philander Smith C	*	1,635	
Phillips County CC	432	464	412
S Arkansas U	720	810	470
El Dorado Branch	504	600	288
Technical Branch	552	600	300
Southern Baptist C	2,094	2,062	
U of Arkansas	780	900	1,260
Little Rock	800	900	1,260
Medical Sciences	*	900	1,260
Monticello	768	850	900
Pine Bluff	710	860	1,260
U of Central Arkansas	*	740	710
Westark CC	468	522	720
CALIFORNIA			
Ambassador C	1,553	1,600	
American Acad Dramatic Arts—West	2,975	2,975	
American River C	*	0	2,190
Antelope Valley C	*	25	1,950
Antioch U West	*	4,650	
Armstrong C	2,178	2,178	
Art Center C of Design	3,940	4,310	
Azusa Pacific U	4,380	4,780	
Bakersfield C	*	60	2,160
Barstow C	*	0	2,205
Bethany Bible C	2,722	2,962	
Biola U	4,082	4,470	
Bjorn s Hairstyling Acad	*	3,000	
Brooks C	3,780	3,780	
Brooks Inst	3,100	3,100	
Cal Baptist C	3,022	3,320	
Cal C of Arts & Crafts	4,810	5,190	
Cal Inst of Arts	5,600	6,200	
Cal Inst of Tech	7,575	8,781	
California Lutheran C	4,510	5,010	
Cal Maritime Academy	1,192	1,309	1,752
Cal Sch of Court Reporting	*	2,200	
Cancer Foundation of Santa Barbara Sch of Tech	*	400	
Cerritos CC	*	16	2,130
Chabot C	*	100	2,250
Chaffey C	*	15	2,475
Chapman C	5,570	6,220	
Christ C Irvine	3,120	3,600	
Christian Heritage C	3,000	3,170	
Citrus College	*	100	2,160
Claremont McKenna C	7,250	8,010	
Cogswell C	3,200	3,600	
C of the Canyons	*	0	2,400
C of Ctr for Early Ed	2,100	2,365	
C of the Desert	*	45	2,520
C of Notre Dame	4,700	5,100	
C of the Sequoias	*	20	2,400
C of the Siskiyous	30	35	2,160
Columbia C	*	9	2,610
Columbia C, Hollywood	*	3,000	
Commercial Diving Ctr	4,700	4,700	
Cosumnes River C	*	0	2,190
Cypress C	10	25	2,160
De Anza C	*	27	2,160
Dominican C, San Rafael	4,510	4,954	
Dominican Sch of Philos & Theology	*	2,410	
Don Bosco Tech Inst	1,850	1,850	
D-Q University	3,030	3,030	
East Los Angeles C	*	0	2,940
El Camino C	*	10	2,190
Evergreen Valley C	*	20	2,700
Fashion Inst of Design & Merch	4,100	5,420	
Feather River C	*	20	2,160
Foothill C	*	50	2,110
Fresno City C	*	8	2,190
Fresno Pacific C	3,890	4,250	
Gavilan C	*	18	2,610
Glendale CC	*	15	2,160
Golden Gate U	2,610	2,830	
Grossmount Adult Health Careers Center	*	300	
Grossmont C	*	0	2,160
Harvey Mudd C	7,560	8,260	
Hebrew Union College Jewish Inst of Religion	*	4,300	
Holy Names C	4,570	5,020	
Humphreys C	*	2,090	
International College	4,000	4,250	
John F. Kennedy U	*	3,230	
Kings River CC	*	8	2,190
La Puente Valley Voc Ctr	70	105	
Lassen C	30	30	2,280
Life Bible C	1,980	2,070	
Lincoln U	2,535	2,800	
Loma Linda U	5,230	5,490	
Los Angeles Baptist C	3,600	3,490	
Los Angeles City C	*	0	2,940
Los Angeles County Med Center Sch of Nursing	1,200	1,200	
Los Angeles Harbor C	*	20	2,940
Los Angeles Mission C	*	0	2,940
Los Angeles Pierce C	*	0	2,940
Los Angeles SW C	*	7	2,940
Los Angeles Trade and Tech C	*	0	2,940
Los Angeles Valley C	*	0	2,940
Loyola Marymount U	5,139	5,605	
Marymt Palos Verdes C	3,675	4,185	
Menlo C	5,970	6,490	
Merced C	*	160	2,160
Mills C	6,450	7,220	
Modesto JC	*	8	2,640
Monterey Inst of Internatl Studies	4,950	5,450	
CALIFORNIA—Continued			
Mount St Mary's C	4,560	5,160	
Mount San Antonio C	*	48	2,370
Napa Valley C	*	18	2,160
National U	3,060	3,240	
New C of Cal	2,740	3,000	
North Valley Occupational Center	*	50	
Northrop U	4,995	5,445	
Occidental C	6,999	7,899	
Otis Art Inst, Parsons Sch of Design	4,780	5,380	
Pacific Career C	*	3,300	
Pacific Christian C	2,756	2,750	
Pacific Oaks C	4,820	5,100	
Pacific Travel Sch	2,495	3,090	
Pacific Union C	5,220	5,490	
Palo Verde C	*	20	1,170
Palomar C	*	30	2,250
Patten C	*	2,256	
Pepperdine U	6,688	7,527	
Pitzer C	7,828	8,702	
Point Loma C	3,693	3,783	
Pomona C	7,390	8,110	
Porterville C	*	45	2,160
Ron Bailie Sch of Broadcasting	4,990	5,590	
Saddleback CC	*	10	2,160
St Joseph's C	*	3,500	
St Luke's Sch of Nursing	2,700	2,730	
St Mary's C of Cal	5,130	5,530	
Salinas Beauty C	1,940	2,421	
Samuel Merritt Hospital Sch of Nursing	*	6,600	
San Bernardino Valley C	*	8	2,250
San Diego City C	*	10	1,860
San Diego Mesa C	*	4	1,860
San Diego Miramar C	*	4	1,860
San Francisco Art Inst	4,820	5,110	
San Francisco C of Mortuary Science	*	2,773	
San Fran Cons of Music	5,035	5,335	
San Joaquin Delta C	*	0	2,190
San Jose Bible C	2,112	2,685	
Santa Rosa JC	*	50	2,160
Scripps C	7,190	7,965	
Sequoia Auto Inst	4,100	4,580	
Simpson C	3,050	3,250	
Solano CC	*	0	2,370
CALIFORNIA—Continued			
Southern California C	3,096	3,376	
Southern California Inst of Architecture	3,730	4,230	
Southwestern C	*	50	1,584
Stanford U	8,220	9,027	
Taft C	*	0	2,160
Transprtn Training Corp	3,800	3,495	
U S International U	4,770	5,597	
U of Judaism	3,040	3,340	
U of La Verne	5,156	5,764	
U of the Pacific	7,615	8,015	
U of Redlands	6,750	7,510	
U of San Diego	5,160	5,760	
U of San Francisco	4,980	5,420	
U of Santa Clara	5,190	5,607	
U of Southern Cal	7,160	7,925	
U of West Los Angeles	2,274	4,000	
Valley C of Med and Dental Careers	*	3,832	
West Coast Christian C	1,800	2,040	
West Coast U	*	3,912	
West Hills C	*	60	
West Los Angeles C	*	0	2,250
West Valley C	*	32	2,100
Western St U C of Law Orange County	4,396	4,880	
San Diego	4,396	4,906	
Westmont C	5,490	5,876	
Whittier C	5,886	6,861	
Woodbury U	3,819	4,121	
World C West	3,810	4,600	
Yeshiva U of L A	2,200	2,200	
COLORADO			
Adams St C	*	1,000	2,008
Baptist Bible C of Denver	*	2,550	
Bernel Hairstyling C	2,150	2,150	
Beth-El Sch of Nursing, Memorial Hosp	2,350	2,668	1,568
Colorado C	6,400	7,000	
Colorado Mountain C Spring Valley	*	620	2,610
Timberline	*	606	2,610
Colorado NW CC	580	580	1,790
Colorado Sch of Mines	2,280	2,554	3,894
Colorado St U	951	1,264	3,111
Colorado Tech C	*	2,650	
COLORADO—Continued			
Intermountain Bible C	1,212	1,220	
Loretto Heights C	4,945	5,445	
Metropolitan St C	*	872	2,380
Naropa Inst	3,405	3,405	
National Camera Tech Training Division	*	4,150	
Nazarene Bible C	1,143	1,484	
Northeastern JC	423	438	1,731
Regis C	5,160	5,820	
Rockmont C	3,225	3,640	
Rocky Mtn Sch of Art	2,780	3,300	
Ron Bailie Sch of Broadcasting	*	5,590	
Trinidad St JC	*	864	1,368
U of Denver	6,150	6,696	
U of So Colorado	974	1,066	2,878
Western Bible C	*	2,805	
Western St C of Colorado	*	1,009	2,544
CONNECTICUT			
Albertus Magnus C	4,802	5,490	
Asnuntuck CC	434	500	1,104
Briarwood C	3,190	3,665	
Bridgeport Engineering Inst	1,705	1,730	
Bridgeport Hospital Sch of Nursing	*	2,529	
Central Conn St C	951	1,051	1,130
Connecticut Bus Inst	*	3,330	
Connecticut C	8,000	8,750	
Connecticut Sch of Electronics	3,350	3,800	
Creative Hairstyling & Skin Care Sch	2,500	2,900	
Creative Sch of Hairdressing	*	2,900	
E Connecticut St C	992	1,092	1,130
Fairfield U	5,145	5,690	
Greater Hartford CC	434	500	1,104
Greater New Haven St Tech C	492	576	1,173
Hartford C for Women	4,150	4,600	
Hartford Cons of Music & Dance	*	2,855	
Hartford St Tech C	492	576	1,173

Continued on Following Page

Tuition

Continued from Preceding Page

CONNECTICUT—Continued

	1982-83 Tuition and fees	1983-84 Tuition and fees	1983-84 Added out-of-state tuition
Henry Abbott Regional Voc-Tech Sch	0	0	1,966
Holy Apostles C	*	2,235	
Hosp of St Raphael Sch of Rad Tech	500	500	
Housatonic Regional CC	434	500	1,104
Manchester CC	*	500	1,104
Mattatuck CC	434	500	1,104
Middlesex CC	434	500	1,104
Mitchell C	5,410	5,843	
Mohegan CC	434	500	1,104
Morse Sch of Business	*	3,390	
NW Connecticut CC	434	500	1,104
Norwalk CC	434	500	1,104
Norwalk St Tech C	492	576	1,173
Ona M. Wilcox Sch of Nursing	*	2,434	
Post C	4,000	4,200	
Quinebaug Valley CC	434	500	1,104
Quinnipiac C	5,145	5,590	
Sacred Heart U	3,450	3,750	
St Alphonsus C	2,900	2,900	
St Francis Hospital Sch of Nursing	*	1,800	
St Joseph C	4,570	4,820	
South Central CC	434	500	1,104
S Connecticut St C	883	993	1,130
Thames Valley St Tech C	492	576	1,173
Trinity C	7,490	8,420	
Tunxis CC	434	500	1,104
U.S. Coast Guard Acad	*	300	
U of Bridgeport	5,943	6,453	
U of Connecticut	1,225	1,467	3,080
U of Hartford	6,400	7,150	
Waterbury St Tech C	492	576	1,173
Wesleyan U	8,370	8,810	
W Connecticut St C	816	1,029	1,130
Yale U	8,190	9,050	

DELAWARE

	1982-83 Tuition and fees	1983-84 Tuition and fees	1983-84 Added out-of-state tuition
Brandywine C of Widener U	3,600	3,950	
Delaware St C	650	650	950
Delaware Tech & CC			
Southern Campus	*	591	576
Stanton/Wilmington	601	601	576
Goldey Beacom C	2,700	3,030	
Wesley C	5,230	5,230	
Wilmington C	3,180	3,220	
Wilmington Med Ctr Radiologic Tech	660	800	

DIST. OF COLUMBIA

	1982-83 Tuition and fees	1983-84 Tuition and fees	1983-84 Added out-of-state tuition
American U	6,270	7,070	
Beacon C	2,450	3,035	
Ben Franklin U	2,750	2,750	
Catholic U of America	5,870	6,370	
Corcoran Sch of Art	3,980	4,470	
Gallaudet C	1,275	1,654	
George Wash U	5,100	6,300	
Georgetown U	6,830	7,730	
Howard U	2,515	2,715	
Mount Vernon C	4,800	5,600	
Southeastern U	3,000	3,820	
Strayer C	*	2,640	
Trinity C	5,485	6,000	

FLORIDA

	1982-83 Tuition and fees	1983-84 Tuition and fees	1983-84 Added out-of-state tuition
Art Inst of Ft Lauderdale	*	4,485	
Baptist Bible Inst	*	875	
Barry U	4,400	4,790	
Bauder Fashion C	4,105	4,670	
Bethune-Cookman C	3,162	3,212	
Biscayne C	3,300	4,070	
Brevard CC	480	580	570
Broward CC	480	570	660
Central Fla CC	480	570	660
Clearwater Christian C	1,715	1,945	
C of Boca Raton	4,400	5,000	
Collier County Voc-Tech Ctr	170	170	50
Daytona Beach CC	540	570	660
Eckerd C	5,595	6,090	
Edison CC	510	570	690
Embry-Riddle Aero U	2,930	2,930	
Flagler C	2,700	2,830	
Florida C	2,300	2,400	
Florida Inst of Tech	3,985	3,750	
Florida JC Jacksonville	480	480	540
Florida Keys CC	480	570	660
Florida Memorial C	*	2,700	
Florida Southern C	3,360	3,645	
Fort Lauderdale C	1,840	2,050	
Gulf Coast CC	520	560	540
Hillsborough CC	*	580	660
Hobe Sound Bible C	1,600	1,700	
Indian River CC	510	510	540
International Fine Arts C	5,985	5,985	
International Tech Inst	*	3,895	
Jacksonville U	3,985	4,400	
Jones C	1,440	2,484	
Loraine's Hairstyling Acad	*	2,100	
Manatee JC	510	510	630
Miami Christian C	2,750	3,010	
Miami-Dade CC	540	595	660
Morris JC of Business	1,458	1,840	
North Florida JC	420	420	420
Nova U	*	3,600	
Okaloosa-Walton JC	480	510	570
Orlando C	1,620	2,275	
Palm Beach Atlantic C	2,350	2,770	
Palm Beach JC	540	570	570
Pasco-Hernando CC	540	580	660
Pensacola JC	510	600	600
Pinellas Voc-Tech Inst	180	180	50
Polk CC	*	510	660
Ringling Sch of Art and Design	2,600	3,725	
Rollins C	5,936	6,586	
St John Vianney C Seminary	1,875	1,990	
St Johns River CC	480	480	600
St Leo C	3,801	4,046	
St Petersburg JC	540	570	660
Santa Fe CC	480	570	540
Seminole CC	540	570	630
Stetson U	4,385	4,740	
Sunstate C of Hair Design	*	2,000	
Tampa C	1,800	2,025	
Tampa Tech Inst	*	3,919	
United Electronics Inst	4,200	3,563	
U of Miami	5,896	6,546	
U of Sarasota	2,850	2,850	
U of Tampa	5,036	5,678	
Valencia CC	540	570	660
Warner Southern C	3,350	3,400	
Webber C	3,175	3,175	

GEORGIA

	1982-83 Tuition and fees	1983-84 Tuition and fees	1983-84 Added out-of-state tuition
Abraham Baldwin Agr C	633	705	1,125
Agnes Scott C	5,175	5,575	
Albany JC	*	609	1,122
Albany State C	*	966	1,485
Andrew C	*	1,836	
Armstrong St C	751	847	1,485
Atlanta Area Tech	115	160	240
Atlanta Christian C	1,574	1,670	
Atlanta C of Art	3,850	4,330	
Atlanta JC	519	591	1,125
Augusta C	750	846	1,485
Bainbridge JC	523	595	1,125
Bauder Finishing & Career C	*	3,905	
Berry C	3,480	3,975	
Beulah Hts Bible C	1,050	1,140	
Brenau C	3,076	3,150	
Brewton-Parker C	1,725	1,900	
Brunswick JC	579	651	1,125
Clark C	3,315	3,515	
Clayton JC	513	591	1,125
Columbus C	735	830	1,485
Coosa Valley Voc-Tech Sch	*	280	
Covenant C	4,070	4,310	
Crandall C	1,600	2,600	
Dalton JC	519	591	1,125
DeKalb CC	630	690	720
DeVry Inst of Tech	3,025	3,188	
Draughon's JC	2,000	2,030	
Emanuel County JC	534	606	1,125
Emmanuel C	1,900	1,980	
Emmanuel C Sch of Christian Ministries	1,980	1,980	
Emory U	6,270	6,920	
Fort Valley State C	*	990	1,476
Gainesville JC	537	609	1,125
Georgia Baptist Hosp Sch of Nursing	*	1,920	
Georgia C	771	886	1,486
Georgia Inst of Tech	1,089	1,226	2,400
Georgia Military C	1,663	1,693	
Georgia Southern C	855	963	1,485
Georgia Southwestern C	834	930	1,485
Georgia St U	915	1,050	2,340
Gordon JC	*	621	1,125
Gupton-Jones C of Funeral Service	*	3,200	
Houston Voc Center	*	130	
Kennesaw C	684	807	1,485
La Grange C	2,415	2,625	
Lanier Area Voc-Tech Sch	*	228	
Macon JC	*	591	1,125
Med C of Georgia	1,055	1,143	1,968
Mercer U	3,665	4,530	
Atlanta	2,997	3,330	
S Sch of Pharmacy	4,350	4,804	
Middle Ga C	514	696	1,125
Morehouse C	3,256	3,556	
Morris Brown C	3,170	3,370	
North Georgia C	801	915	1,485
Oglethorpe U	3,990	4,490	
Oxford C of Emory U	4,900	5,200	
Paine C	2,535	2,970	
Phillips C: Columbus	*	3,563	
Piedmont C	1,783	1,933	
Reinhardt C	2,244	2,625	
Savannah C of Art & Design	*	3,360	
Savannah St C	855	867	1,362
Shorter C	2,700	2,950	
S Georgia C	*	678	1,125
Southern Tech Inst	768	879	1,485
Spelman C	3,200	3,540	
Thomas County CC	1,575	1,716	
Tift C	2,385	2,610	
Toccoa Falls C	2,500	2,770	
Truett McConnell C	*	2,317	
U of Georgia	1,107	1,242	1,968
Valdosta St C	849	945	1,485
Waycross JC	522	594	1,125
Wesleyan C	3,730	3,145	800
West Georgia C	834	966	1,485
Young Harris C	2,190	2,190	

HAWAII

	1982-83 Tuition and fees	1983-84 Tuition and fees	1983-84 Added out-of-state tuition
Brigham Young U Hawaii Campus	1,050	1,150	
Cannon's International Bus C of Honolulu	*	2,352	
Chaminade U: Honolulu	2,980	3,378	
Hawaii Loa C	3,200	4,000	
Hawaii Pacific C	*	2,900	
Hawaii Sch of Bus	*	1,772	
Hollywood Beauty C	2,919	3,526	
U of Hawaii			
Hilo	110	185	1,640
Honolulu CC	90	170	1,310
Kapiolani CC	90	170	1,310
Kauai CC	90	170	1,310
Leeward CC	90	170	1,310
Manoa	480	650	1,440
Maui CC	90	170	1,310
West Oahu C	400	510	1,090
Windward CC	90	170	1,310

IDAHO

	1982-83 Tuition and fees	1983-84 Tuition and fees	1983-84 Added out-of-state tuition
Boise St U	701	900	1,900
C of Idaho	4,600	5,003	
C of Southern Idaho	586	650	600
Idaho St U	705	811	1,900
Lewis-Clark St C	640	740	1,900
Mr Juan's C Hair Design	1,000	1,250	
NW Nazarene C	3,480	3,735	
Ricks C	1,140	1,350	
U of Idaho	716	816	2,000

ILLINOIS

	1982-83 Tuition and fees	1983-84 Tuition and fees	1983-84 Added out-of-state tuition
Alvareita's C of Cosmetology	*	738	
American Cons of Music	3,400	3,400	
Augustana C	4,743	5,196	
Aurora C	3,975	4,375	
Barat C	4,800	4,900	
Belleville Area C	570	630	1,320
Black Hawk C East Campus	944	944	1,520
Blackburn C	3,320	3,810	
Bradley U	4,590	5,150	
Brisk Rabbinical C	2,100	2,100	
Capri-Garfield Ridge Sch of Beauty Culture	*	2,125	
Carl Sandburg C	612	619	1,929
City C of Chicago			
Chicago City-Wide C	640	710	820
Loop C	640	710	820
Malcolm X C	*	710	820
Olive-Harvey C	640	710	820
Wright C	640	710	820
C of DuPage	680	765	1,620
C of Lake County	485	545	2,014
C of St Francis	3,560	3,834	
Concordia C	3,021	3,047	
De Lourdes C	1,350	1,450	
De Paul U	4,260	4,332	
Debbie's Sch of Beauty Culture	*	2,650	
DeVry Inst of Tech	3,025	3,250	
Elgin CC	*	788	1,803
Elmhurst C	3,850	4,040	
Eureka C	3,750	3,350	
Evangelical Sch of Nursing	3,142	3,618	
Felician C	1,560	1,860	
George Williams C	4,575	5,136	
Greenville C	4,290	4,587	
Hebrew Theol C	*	1,435	
Highland CC	512	540	1,620
Illinois Benedictine C	4,201	4,601	
Illinois Central C	480	512	2,528
Illinois C	3,075	3,300	
Illinois Inst of Tech	5,700	6,390	
Illinois Tech C	*	4,082	
Illinois Valley CC	*	350	1,955
Illinois Wesleyan U	5,427	5,870	
International Acad of Merch & Design	3,950	3,960	
John Wood CC	450	590	1,800
Joliet JC	*	620	1,677
Joliet Township High* Sch: Sch of Practical Nursing	*	1,050	
Judson C	*	5,060	
Kankakee CC	512	585	1,650
Kendall C	3,468	3,950	
Kishwaukee C	562	668	1,472
Knox C	6,435	6,999	
Lake Forest C	6,745	7,710	
Lake Land C	*	780	1,572
Lakeview Med Ctr Sch of Nursing	2,050	3,000	
LaSalle S of Beauty Cul	1,650	1,650	
Lewis & Clark CC	*	528	1,650
Lewis U	4,190	4,758	
Lincoln Christian C	*	2,720	
Lincoln C	4,300	4,580	
Loyola U of Chicago	4,170	4,680	
MacCormac C	2,970	3,150	
MacMurray C	4,470	4,870	
Mallinckrodt C	2,270	2,430	
McKendree C	3,390	3,670	
Memorial Medical Ctr J. Edward King Sch of Radiography	*	600	
Midstate C	*	2,515	
Midwest C of Engr	4,320	4,320	
Millikin U	4,857	5,057	
Moline Public Hosp Sch of Nursing	*	2,881	
Monmouth C	5,335	6,050	
Moody Bible Inst	130	316	
Morrison Inst of Tech	2,150	2,230	
Morton C	540	570	2,438
Mundelein C	4,155	4,515	
National C of Ed	4,620	4,545	
Native American Educational Services	*	3,350	
Niles C	*	4,682	
North Central C	4,764	5,187	
North Park C & Theol Sem	4,600	4,919	
Northwestern U	8,085	8,895	
Northwestern U Dental Sch: Hygiene Program	*	5,715	
Oakton CC	*	500	2,445
Olivet Nazarene C	3,340	3,606	
Parkland C	510	585	3,070
Parks C of St Louis U	3,240	3,470	
Principia C	5,616	6,210	
Quincy C	4,000	4,300	
Ray-Vogue C of Design	*	3,600	
Rend Lake C	*	480	2,448
Rock Valley C	*	720	1,466
Rockford C	4,490	4,990	
Roosevelt U	3,882	4,302	
Rosary C	4,300	4,700	
Rush U	*	4,740	
St Francis Hospital Sch of Nursing	*	4,939	
St Mary of Nazareth Hosp Sch of Nursing	4,085	4,900	
St Mary's Hospital Sch of Med Tech	100	100	
Sauk Valley C	750	750	1,225
Sch of Art Inst: Chicago	5,105	5,550	
Sherwood Music Sch	2,200	2,200	
Shimer C	*	3,930	
SE Illinois C	330	540	2,340
S Illinois U Carbondale	1,200	1,307	1,788
Edwardsville	1,042	1,184	1,764
Spertus C of Judaica	2,400	2,680	
Springfield C	2,705	2,880	
Sterling Sch of Beauty Culture	720	900	
Thornton CC	664	784	1,680
Tri-County Beauty Acad	1,275	2,000	
Trinity Christian C	3,700	4,270	
Trinity C	4,300	4,575	
Triton C	*	660	1,788
U of Chicago	7,065	8,043	
U of Illinois			
Chicago	1,200	1,533	2,208
Health Sciences Center	1,494	1,833	2,208
Urbana-Champaign	1,210	1,532	2,208
Waubonsee CC	*	643	1,959
Wheaton C	4,780	5,280	
William Rainey Harper C	*	780	1,731

INDIANA

	1982-83 Tuition and fees	1983-84 Tuition and fees	1983-84 Added out-of-state tuition
Ancilla Domini C	1,102	1,159	
Anderson C	3,840	4,160	
Ball St U	1,275	1,362	1,758
Bethel C	3,220	3,474	
Butler U	4,440	4,980	
Calumet C	2,033	2,273	
DePauw U	6,250	6,700	
Earlham C	6,520	6,900	
Fort Wayne Bible C	*	3,474	
Franklin C	4,790	5,050	
Goshen C	4,165	4,375	
Grace C	3,546	3,660	
Hanover C	3,600	3,800	
Huntington C	4,085	4,375	
Indiana Central U	4,100	4,450	
Indiana Inst of Tech	3,510	3,840	
Indiana Northern U	*	3,330	
Indiana St Beauty C	2,018	2,118	
Indiana St U	1,275	1,410	1,876
Evansville	1,080	1,193	1,624
Indiana U-Purdue U			
Fort Wayne	1,164	1,320	1,850
Indianapolis	1,213	1,302	2,130
Indiana Voc-Tech C			
Central Indiana	*	1,024	821
Columbus	*	1,070	821
Eastcentral	970	1,014	821
Kokomo	972	1,063	821
Lafayette	977	1,050	821
Northcentral	963	1,125	821
Northeast	*	1,047	821
Southcentral	956	1,040	821
Southeast	*	1,062	821
Southwest	987	1,033	821
Wabash Valley	*	1,014	821
Whitewater	981	1,056	821
International Bus C	3,760	4,200	
ITT Tech-Business Inst	4,250	4,500	
Lowell Beauty C	*	1,650	
Manchester C	4,250	4,580	
Marian C	3,295	3,595	
Marion C	*	4,230	
Martin Center C	2,250	2,250	
Michiana C, Commerce	1,485	1,620	
National Barber/Stylist C	*	3,130	
Oakland City C	3,375	3,690	
Odessa's C of Beauty Culture	1,600	1,700	
Parkview-Methodist Sch of Nursing	2,000	2,000	600
Purdue U	1,350	1,432	2,828
Calumet	1,171	1,237	1,755
North Central	*	1,241	1,864
Rose-Hulman Inst of Tech	4,750	5,400	
St Elizabeth Hosp Sch of Nursing		2,280	
St Francis C	3,298	3,245	
St Francis Hosp Ctr Sch of Med Tech	*	750	
St Joseph's C	4,090	4,480	
St Mary-of-the-Woods C	3,990	4,380	
St Mary's C	5,237	5,812	
St Meinrad C	2,470	2,618	
Taylor U	4,514	4,870	
Tri-State U	3,744	4,210	
U of Evansville	4,288	4,965	
U of Notre Dame	5,950	6,520	
Valparaiso U	4,782	5,282	
Vincennes U	1,010	1,090	1,880
Wabash C	5,280	5,790	

IOWA

	1982-83 Tuition and fees	1983-84 Tuition and fees	1983-84 Added out-of-state tuition
American Inst of Business	2,370	2,580	
Briar Cliff C	3,450	3,780	
Buena Vista C	4,910	5,400	
Capri Cosmetology C			
Dubuque	*	2,400	
Mason City	*	1,500	
Central C	4,740	5,100	
Clarke C	4,150	4,500	
Coe C	5,370	5,900	
Cornell C	5,616	6,010	
Des Moines Area CC	720	929	810
Divine Word C	3,000	3,200	
Dordt C	3,850	4,200	
Drake U	5,230	5,750	
Faith Baptist Bible C	2,520	2,750	
Finley Hosp Sch of Nursing	3,546	3,546	
Graceland C	4,090	4,445	
Grand View C	3,390	3,750	
Grinnell C	6,710	7,070	
Hamilton Tech C	2,850	2,425	
Hawkeye Inst of Tech	600	711	660
Indian Hills CC	*	745	315
Iowa Central CC	*	729	325
Iowa Lakes CC	*	790	345
Iowa Methodist Sch of Nursing	2,820	3,735	
Iowa St U	1,040	1,104	1,646
Iowa Wesleyan C	4,625	4,900	
Iowa Western CC	845	897	435
J Edmundson Mem Hosp Sch of Nursing	1,257	1,551	288
La James C of Hairstyling			
Fort Dodge	2,100	2,550	
Mason City	2,100	2,500	
Loras C	4,180	4,500	
Luther C	5,225	5,600	
Maharishi International U	4,320	4,488	
Marshalltown CC	680	680	620
Marshalltown Comm Sch of Nursing	1,200	1,320	
Marycrest C	3,720	4,220	
Mercy Hospital Sch of Nursing	*	3,630	
Morningside C		4,970	
Mount Mercy C	3,970	4,285	
Mount St Clare C	2,450	3,040	
North Iowa Area CC	660	744	330
NE Iowa Tech Inst	600	800	800
Northwestern C	3,895	4,395	
Open Bible C	2,170	2,420	
St Ambrose C	4,410	4,890	
St Luke's Sch of Nursing	3,119	3,284	
Schoitz Mem Hosp Sch of Radiologic Tech	350	350	
Simpson C	5,035	5,430	
Sioux Empire C	2,750	3,050	
Southeastern CC			
North	657	697	335
South	657	697	335
Southwestern CC	660	746	348
Spencer Sch of Business	2,850	2,850	
U of Dubuque	4,275	4,575	
U of Iowa	1,040	1,104	1,646
U of Northern Iowa	990	1,050	1,124
Upper Iowa U	4,140	4,450	
Vennard C	1,900	2,192	
Waldorf C	4,250	4,750	
Wartburg C	*	5,210	
Western Iowa Tech CC	605	683	636
Westmar C	4,130	4,601	
William Penn C	5,110	5,460	

KANSAS

	1982-83 Tuition and fees	1983-84 Tuition and fees	1983-84 Added out-of-state tuition
Asbury Hospital Sch of Nursing		1,520	
Baker U	3,370	3,570	
Barton County CC	465	555	1,041
Benedictine C	3,700	4,020	
Bethany C	3,090	3,490	
Bethel C	3,520	3,830	
Central C	3,400	3,600	
Central Kansas Area Voc-Tech Sch	*	332	2,819
Cloud County CC	*	570	1,200
Colby CC	540	600	1,110
Cowley County CC	450	480	1,050
Dodge City CC	486	486	970
Donnelly C	1,100	1,300	
Emporia St U	756	864	952
Fort Hays St U	833	945	945
Fort Scott CC	300	310	1,175
Friends Bible C	3,538	3,750	
Friends U	3,525	3,765	
Garden City CC	486	494	970
Haskell Indian JC	*	20	
Hesston C	3,500	3,700	
Highland CC	550	550	1,236
Hutchinson CC	462	522	1,434
Independence CC	480	510	1,236
Kansas Newman C	3,315	3,625	
Kansas St U	898	1,076	1,580
Kansas Tech Inst	421	496	877
Kansas Wesleyan	3,570	3,993	
Labette CC	*	390	790
Manhattan Christian C	1,678	1,810	
Marymount C	3,225	3,585	
McPherson C	3,490	3,800	
Mid-Am Nazarene C	2,394	2,722	
Neosho County CC	430	430	1,245
NW Kansas Area Voc-Tech Sch	615	615	
Ottawa U	3,392	3,730	
Pittsburg State U	726	842	952
Pratt CC	514	546	984
St John's C	2,750	3,500	
St Mary C	2,850	3,266	
St Mary of Plains C	3,110	3,510	
Salina Area Voc-Tech Sch	*	400	2,800
Seward County CC	480	480	1,255
Southwestern C	3,050	3,495	
Sterling C	3,350	3,350	
Stormont Vail Sch of Nursing	*	1,105	
Tabor C	3,320	3,570	
U of Kansas	904	1,070	1,580
C of Health Sciences	724	860	1,580
Wichita Area Voc-Tech Sch	*	350	2,200
Wichita St U	930	1,067	1,579

KENTUCKY

	1982-83 Tuition and fees	1983-84 Tuition and fees	1983-84 Added out-of-state tuition
Alice Lloyd C	2,050	2,245	
Asbury C	3,268	3,520	
Ashland CC	390	414	828
Bellarmine C	3,350	3,600	
Berea C	118	120	
Bowling Green Bus C	*	2,861	
Brescia C	2,700	2,896	
Campbellsville C	2,640	2,880	
Centre C	*	5,960	
Cumberland C	2,380	2,380	
Eastern Kentucky U	724	846	1,550
Elizabethtown CC	390	414	828
Georgetown C	3,310	3,630	100
Hazard CC	390	414	828
Hazard St Voc-Tech Sch	*	76	364
Henderson CC	*	414	828
Hopkinsville CC	*	414	828
Inst of Elec Tech	2,850	3,200	
Kauffman Beauty Sch	*	2,685	
Kentucky Christian C	1,758	1,704	
Kentucky State U	*	826	1,550
Kentucky Wesleyan C	3,245	3,770	
Lees JC	2,400	2,400	
Lexington Tech Inst	846	1,018	1,868
Lindsey Wilson C	2,420	2,680	
Louisville Sch of Art	2,380	2,580	
Madisonville CC	390	414	828
Maysville CC	390	414	828
Midway C	2,730	3,030	

KENTUCKY—Continued

	1982-83 Tuition and fees	1983-84 Tuition and fees	1983-84 Added out-of-state tuition
Morehead State U	*	816	1,550
Murray State U	*	836	1,350
Northern Kentucky U	714	816	1,550
Paducah CC	390	414	828
Pikeville C	2,825	2,994	
Prestonburg CC	390	414	828
St Catharine C	2,100	2,400	
St Joseph Hosp of Radiologic Tech	*	50	
Somerset CC	390	414	828
Somerset St Voc-Tech Sch	*	76	
Southeast CC	390	414	828
Spalding C	3,072	3,582	
Sue Bennett C	1,320	1,615	
Sullivan JC of Bus	*	3,370	
Thomas More C	3,880	4,090	
Transylvania U	5,320	5,700	
Union C	3,450	3,950	
U of Kentucky	846	1,018	1,868
U of Louisville	846	999	1,868
Watterson C	2,415	2,805	
Western Kentucky U	714	816	1,550

LOUISIANA

	1982-83 Tuition and fees	1983-84 Tuition and fees	1983-84 Added out-of-state tuition
Bossier Parish CC	36	270	
Centenary C	3,160	3,570	
Dillard U	*	3,300	
D-Jay's Sch of Beauty Arts and Sciences	2,457	2,857	
Grambling State U	*	755	630
Louisiana C	1,954	2,108	
Louisiana State U and A&M C	*	971	1,330
Louisiana State U			
Alexandria	*	500	940
Eunice	*	450	1,000
Medical Center	*	875	750
Shreveport	*	780	1,130
Loyola U	3,717	4,020	
McNeese State U	*	673	630
Newcomb C of Tulane U	6,550	7,350	
Nicholls State U	*	687	630
NE Louisiana U	*	660	630
Our Lady of Holy Cross C	2,575	3,050	
St Joseph Seminary C	*	2,530	
St Mary's Dominican C	3,890	4,000	
Slidell Voc-Tech Sch	*	0	270
Southern U and A&M C	*	650	630
Southern U Shreveport-Bossier City	394	454	200
Touro Infirmary Sch of Nursing	*	2,255	2,042
Tulane U	6,550	7,350	
U of New Orleans	*	984	1,310
Ville Platte Voc-Tech Sch	*	0	270
Xavier U	*	3,465	

MAINE

	1982-83 Tuition and fees	1983-84 Tuition and fees	1983-84 Added out-of-state tuition
Andover C	2,100	2,100	
Bates C	8,100	8,890	
Beal C	2,625	2,625	
Bowdoin C	7,865	8,710	
Central Maine Med Ctr			
Sch of Nursing	*	3,081	
Sch of Radiologic Tech	400	400	
Central Maine Voc Tech Inst	630	625	600
Colby C	7,650	8,330	
C of the Atlantic	4,850	5,490	
Eastern Maine V-T Inst	700	705	600
Husson C	4,275	5,275	
Kennebec Valley Voc-Tech Inst	*	350	300
Maine Maritime Acad	2,455	2,755	1,795
Mansfield Beauty Acad	*	2,805	
Mr Bernard's Sch of Hair Fashion	2,450	2,450	
Northern Maine V-T Inst	660	712	600
Portland School of Art	4,320	4,990	
St Joseph's C	3,875	4,025	
Southern Maine V-T Inst	600	690	600
Thomas C	4,665	5,055	
Unity C	4,440	4,880	
U of Maine			
Augusta	1,350	1,433	2,217
Farmington	1,385	1,463	2,217
Fort Kent	1,350	1,443	2,217
Machias	1,375	1,453	2,217
Orono	1,440	1,534	3,051
Presque Isle	1,370	1,463	2,217
U of New England	4,775	5,010	
U of Southern Maine	1,434	1,544	3,051
Westbrook C	5,035	5,715	

MARYLAND

	1982-83 Tuition and fees	1983-84 Tuition and fees	1983-84 Added out-of-state tuition
Allegany CC	722	756	1,320
Anne Arundel CC	780	857	2,340
Baltimore Art Inst	2,200	2,420	
Baltimore Hebrew C	*	1,875	
Bowie State C	1,260	1,401	1,110
Broadcasting Inst of Md	2,500	2,800	
Capitol Inst of Tech	2,968	3,507	
Catonsville CC	604	636	1,778
Cecil CC	555	606	1,620
Charles County CC	800	890	1,680
Chesapeake C	509	509	2,216
C of Notre Dame	3,850	4,400	
Columbia Union C	4,334	4,944	
CC of Baltimore	*	745	1,458
Coppin State C	1,160	1,255	1,110
Dundalk CC	*	670	1,646
Eastern Christian C	1,140	1,140	
Essex CC	634	664	1,746
Frederick CC	588	664	1,200
Frostburg State C	1,261	1,351	1,110
Garrett CC	563	690	2,280
Goucher C	6,275	7,125	
Grtr Baltimore Med Ctr Sch of Radiologic Tech	150	410	
Hagerstown Bus C	*	1,750	
Hagerstown JC	630	671	1,470
Harford CC	700	730	2,040
Harmon's Beauty Sch	*	2,000	
Hood C	5,585	6,160	
Howard CC	728	900	2,520
Johns Hopkins U	6,920	7,840	
Laurel Sch of Hair Designs	1,300	1,435	

MARYLAND—Continued

	1982-83 Tuition and fees	1983-84 Tuition and fees	1983-84 Added out-of-state tuition
Loyola C	3,950	4,560	
Marc Sch of Beauty Culture	*	2,215	
Maryland C of Art & Design	3,300	3,960	
Maryland Inst C of Art	4,850	5,300	
Montgomery C			
Germantown	*	990	1,530
Rockville	*	990	1,530
Takoma Park	*	990	1,530
Morgan St U	1,210	1,281	1,135
Mt St Mary's C	4,300	4,700	
Prince George's CC	736	895	2,505
St John's C	6,700	7,200	
St Mary's C of Md	1,405	1,505	1,000
Salisbury State C	1,206	1,354	1,110
Sojourner-Douglas C	*	4,005	
Towson St U	1,218	1,322	1,110
U of Baltimore	1,145	1,249	1,160
U of Maryland			
Baltimore	*	1,284	2,395
Baltimore County	1,224	1,362	2,392
College Park	1,185	1,332	2,395
Eastern Shore	962	1,128	2,000
University C	1,690	2,060	
Villa Julie C	2,850	3,100	
Washington Adventist Hosp Sch, Radiology	*	200	
Washington Bible C	2,356	2,460	
Washington C	4,821	5,381	
Washington Fashion Acad	*	4,100	
Western Maryland C	5,200	5,700	
Woodridge Sch for Secretaries	1,969	1,969	
Wor-Wic Tech CC	570	610	2,250

MASSACHUSETTS

	1982-83 Tuition and fees	1983-84 Tuition and fees	1983-84 Added out-of-state tuition
American Intl C	4,290	4,560	
Amherst C	8,255	8,905	
Anna Maria C for Men and Women	4,300	4,630	
Aquinas JC			
Milton	3,000	3,200	
Newton	3,000	3,200	
Assumption C	4,930	5,330	
Atlantic Union C	5,010	5,546	
Babson C	6,364	7,075	
Bay Path JC	3,700	4,000	
Bay State JC	*	3,750	
Becker JC			
Leicester	2,830	3,180	
Worcester	2,830	3,180	
Bentley C	5,100	5,600	
Berklee C of Music	3,510	3,820	
Berkshire Christian C	2,775	3,615	
Berkshire CC	734	734	1,464
Blue Hills Tech Inst	2,160	2,360	
Boston C	6,150	7,020	
Boston Consv of Music	4,410	5,700	
Boston U	7,275	8,420	
Bradford C	5,800	6,235	
Brandeis U	7,830	8,745	
Bridgewater State C	1,110	1,120	1,947
Bristol CC	724	724	1,464
Bunker Hill CC	739	748	1,464
Burdett Sch	4,150	4,725	
Cape Cod CC	719	719	1,464
Central New England C	4,000	4,500	
Clark U	7,186	7,906	
Clark U Sch at the Worcester Art Museum	*	4,000	
C of the Holy Cross	6,200	6,950	
Control Data Inst	5,375	5,375	
Curry C	5,835	6,495	
Dean JC	5,035	5,235	
East Coast Aero Tech Sch	3,805	4,435	
Eastern Nazarene C	3,326	3,641	
Elms C	*	4,500	
Emerson C	5,900	6,630	
Emmanuel C	5,080	5,300	
Endicott C	4,650	5,300	
Fisher JC	4,200	4,600	
Fitchburg State C	1,015	1,021	1,947
Forsyth Sch for Dental Hygienists	5,650	5,650	
Framingham State C	1,127	1,186	1,947
Franklin Institute of Boston	4,100	4,440	
Goddard Mem Hosp Sch of Rad Tech	500	1,000	
Gordon C	5,247	5,712	
Greenfield CC	740	800	1,464
Hampshire C	8,561	9,260	
Harvard-Radcliffe C's	8,195	9,700	
Hebrew C	1,010	1,110	
Hellenic C	3,095	3,200	
Holyoke CC	749	754	1,464
LaBaron Hairdressing Academy, Brockton	1,887	1,887	
Laboure JC	3,230	4,665	
Lasell JC	4,960	5,155	
Lesley C	5,440	6,220	
M Fazio Inst of Beauty Culture	1,445	2,130	
Marian Court JC Bus	2,520	2,870	
Mass Bay CC	719	744	1,464
Mass C of Art	1,145	1,145	1,947
Mass C of Pharmacy & Allied Health Sci	4,410	4,825	
Mass Inst of Tech	8,700	9,600	
Mass Maritime Acad	*	1,115	
Massasoit CC	739	739	1,464
Merrimack C	4,960	5,350	
Middlesex CC	787	787	1,464
Montserrat Sch Vis Art	2,250	3,200	
Mount Holyoke C	7,750	8,735	
Mount Ida JC	4,044	4,593	
Mt Wachusett CC	774	787	1,464
New England Baptist Hosp Sch of Nursing	2,470	2,713	
New England Conservatory of Music	6,250	7,120	
New England Deac Hosp Sch of Nursing	4,005	4,068	
New England Inst Applied Arts & Sci	3,670	4,200	
New Style Barber Sch	1,800	2,300	
Newbury JC	3,775	4,090	

MASSACHUSETTS—Continued

	1982-83 Tuition and fees	1983-84 Tuition and fees	1983-84 Added out-of-state tuition
Newton-Wellesley Hosp Sch of Nursing	*	4,630	
Nichols C	4,390	4,560	
North Adams State C	1,150	1,118	1,947
North Shore CC	674	714	1,464
NE Inst of Indust Tech	2,670	2,670	
Northeastern U	5,338	5,792	
Northern Essex CC	778	778	1,464
Pine Manor C	6,970	7,200	
Quincy JC	*	1,475	
Quinsigamond CC	779	830	1,464
Regis C	4,955	5,405	
RETS Electronic Schs	4,970	5,170	
Roxbury CC	680	729	1,464
St Hyacinth C-Sem	3,105	3,105	
St John's Seminary & C	*	2,100	
Salem State C	1,047	1,050	1,947
Sch of Fashion Design	*	2,450	
Sch of Museum of Fine Arts	4,955	5,355	
Simmons C	6,658	7,322	
Simon's Rock of Bard C	8,880	8,450	
Smith C	7,820	8,500	
Somerville Hosp Sch of Nursing	*	3,385	
Southeastern Mass U	1,114	1,114	2,151
Springfield C	4,500	4,500	
Springfield Tech CC	765	739	1,464
Stonehill C	4,850	5,240	
Suffolk U	3,720	4,035	
Swain Sch of Design	3,990	4,300	
Tufts U	7,710	8,783	
U of Lowell	1,226	1,236	2,256
U of Massachusetts			
Amherst	1,587	1,656	2,557
Boston	1,374	1,465	2,557
Wellesley C	7,510	8,630	
Wentworth Inst of Tech	*	4,350	
Western Mass Hosp Sch for Practical Nurses	*	500	
Western New England C	4,118	4,578	
Westfield State C	1,139	1,124	1,947
Wheaton C	7,825	8,510	
Wheelock C	5,550	6,280	
Williams C	7,866	8,620	
Worcester Poly Inst	6,907	7,515	
Worcester State C	993	1,023	1,947

MICHIGAN

	1982-83 Tuition and fees	1983-84 Tuition and fees	1983-84 Added out-of-state tuition
Adrian C	4,974	5,376	
Albion C		5,850	
Alma C	5,629	6,072	
Alpena CC	682	682	1,023
Andrews U	4,950	5,206	
Aquinas C	4,498	4,790	
Baker JC of Bus	2,220	2,340	
Calvin C	3,950	4,280	
Ctr for Creative Studies C of Art & Design	3,936	4,726	
Central Michigan U	1,340	1,460	2,190
Chapin JC of Bus	1,850	1,850	
Cleary C	*	2,835	
Concordia C	*	3,149	
Davenport C of Bus	3,410	3,938	
Davis Pressley Prof Sch of Cosmetology	*	3,150	
D'Etre U	*	3,900	
Detroit C of Business	*	3,083	
Eastern Michigan U	*	1,425	1,840
Ferris St C	1,464	1,629	1,710
General Motors Inst	1,864	2,464	
Glen Oaks CC	704	742	
Gogebic CC	570	630	720
Grace Bible C	1,700	1,840	
Grand Rapids Baptist C & Sem	3,160	3,320	
Grand Rapids JC	860	950	1,170
Grand Valley St C	1,380	1,502	2,002
Great Lakes Bible C	1,845	2,001	
Highland Park CC	650	770	600
Hillsdale C	5,370	5,720	
Hope C	5,010	5,410	
Hurley Medical Center Sch of Nursing	*	1,446	
Inst of Merchandising and Design	*	2,625	
Jackson Business Inst	*	2,450	
Jackson CC	840	870	510
Jordan C	2,200	2,300	
Kalamazoo C	6,492	6,922	
Kalamazoo Valley CC	*	630	1,260
Kellogg CC	645	645	890
Kirtland CC	*	600	180
Krainz Woods Acad of Med Lab Tech	4,000	4,110	
Lake Michigan C	710	710	480
Lake Superior St C	*	1,455	1,305
Lansing CC	645	690	788
Lawrence Inst of Tech	1,890	2,100	
Macomb CC	*	900	855
Madonna C	1,950	1,970	
Marygrove C	3,787	3,750	
Marcy Sch of Nursing	3,900	4,160	
Marcy C of Detroit	3,140	3,390	
Michigan Christian C	2,485	2,610	
Mid Michigan CC	*	694	674
Monroe County CC	570	570	270
Montcalm CC	*	784	
Muskegon Business C	2,040	2,305	480
Muskegon CC	*	780	690
Nazareth C	4,790	5,170	
North Central Mich C	*	752	180
Northern Michigan U	*	1,430	1,830
Oakland CC	632	780	300
Oakland U	*	1,365	2,210
Olivet C	5,120	5,080	
Pontiac Business Inst	*	4,005	
Reformed Bible C	2,480	2,700	
Sacred Heart Seminary C	*	2,600	
Saginaw Business Inst	*	2,544	
St Clair County CC	675	705	915
St Joseph Hosp Sch of Radiology	*	600	
St Mary's C	2,100	2,290	
Siena Heights C	*	3,720	
Southwestern Mich C	*	790	330
Spring Arbor C	4,400	4,590	
Suomi C	4,900	5,400	

MICHIGAN—Continued

	1982-83 Tuition and fees	1983-84 Tuition and fees	1983-84 Added out-of-state tuition
U of Detroit	4,810	5,130	
Washtenaw CC	720	810	1,740
Wayne St U	*	1,760	2,100
West Shore CC	650	710	670
William Tyndale C	2,250	2,250	

MINNESOTA

	1982-83 Tuition and fees	1983-84 Tuition and fees	1983-84 Added out-of-state tuition
Acad of Accountancy	3,050	3,050	
Albert Lea Area Voc-Tech Inst	640	789	774
Anoka-Ramsey CC	821	1,013	1,013
Augsburg C	4,820	5,170	
Austin CC	821	1,013	1,013
Bemidji Area Voc-Tech Inst	594	792	756
Bemidji St U	956	1,300	1,120
Bethany Lutheran C	2,870	3,170	
Bethel C	4,550	4,950	
Brainerd Area Voc-Tech Inst	*	791	741
Brainerd CC	*	1,013	1,013
Carleton C	6,951	7,810	
C of St Benedict	4,390	4,810	
C of St Catherine	4,530	4,955	
C of St Scholastica	4,271	4,685	
C of St Teresa	*	4,995	
C of St Thomas	4,160	4,730	
Concordia C			
Moorhead	4,805	5,305	
St Paul	3,450	3,855	
Crosier Seminary	1,700	1,935	
Dr Martin Luther C	1,620	1,650	
Duluth Area Voc-Tech Inst	*	790	864
Dunwoody Industrial Inst	*	1,880	250
Eveleth Area Voc-Tech Inst	576	774	773
Fairview Deaconess Hosp Sch of Nursing	*	5,090	
Fergus Falls CC	821	1,013	1,013
Golden Valley Lutheran C	4,583	4,860	
Gustavus Adolphus C	5,350	6,150	
Hamline U	5,350	5,975	
Hibbing CC	821	1,013	1,013
Inver Hills CC	821	1,013	1,013
Itasca CC	821	1,013	1,013
Lakewood CC	821	1,013	1,013
Lowthian C	3,495	3,995	
Macalester C	6,260	6,975	
Mankato Area Voc-Tech Inst	*	920	920
Mankato St U	829	1,266	1,120
McConnell Sch	*	2,915	
Medical Inst of Minn	3,400	3,700	
Mesabi CC	821	1,013	1,013
Metropolitan St U	589	828	414
Minneapolis C of Art & Design	4,070	4,500	
Minneapolis CC	821	1,013	1,013
Minn VA Med Ctr Sch of Anesthesia	*	2,380	
Minnesota Bible C	1,800	1,890	
Moorhead St U	934	1,271	1,120
Normandale CC	821	1,013	1,013
North Hennepin CC	821	1,013	1,013
North Mem Med Ctr Sch of X-Ray Tech	*	23	
Northland CC	821	1,013	1,013
Northwestern C	3,900	4,260	
NW Electronics Inst	1,665	2,220	
Pine Tech Inst	576	774	774
Rainy River CC	821	1,013	1,013
Robinson Beauty Sch	2,350	2,920	
Rochester CC	821	1,013	1,013
St Cloud Hosp Sch of Nursing	1,950	2,145	
St Cloud St U	973	1,304	1,120
St John's U	4,415	4,810	
St Mary's C	4,300	4,750	
St Mary's JC	3,240	3,690	
St Olaf C	5,335	6,075	
St Paul Bible C	2,580	2,930	
Southwest St U	900	1,271	1,120
Vermilion CC	821	1,013	1,013
Willmar CC	821	1,013	1,013
Winona St U	953	1,289	1,120
Worthington CC	821	1,013	1,013

MISSISSIPPI

	1982-83 Tuition and fees	1983-84 Tuition and fees	1983-84 Added out-of-state tuition
Alcorn St U	825	875	976
Belhaven C	3,125	3,530	
Blue Mountain C	2,010	2,190	
Clarke C	1,680	1,876	
Coahoma JC	*	585	1,250
Copiah-Lincoln JC	400	400	660
Delta St U	770	800	976
East Central JC	456	456	400
Hinds JC	350	370	920
Jackson St U	832	972	976
Jones County JC	400	420	600
Mary Holmes C	*	1,505	
Meridian JC	*	450	510
Millsaps C	4,110	4,650	
Mississippi C	2,460	2,738	
Miss Gulf Coast JC Jeff Davis campus	360	400	400
Mississippi St U	1,146	1,242	976
Mississippi U for Women	*	825	976
Miss Valley St U	800	850	976
Northeast Miss JC	480	480	600
Northwest Miss JC	*	699	600
Pearl River JC	380	380	550
Phillips C	3,500	2,525	
Phillips C of Jackson	*	2,625	
Prentiss Inst	*	1,981	
Rust C	*	2,592	
Southwest Mississippi JC	*	370	700
Tougaloo C	2,450	2,800	
U of Mississippi	1,165	1,284	976
Medical Ctr	966	966	976
U of S Mississippi	1,070	1,140	976
Wesley C	*	1,410	
William Carey C	*	2,280	
Wood JC	1,260	1,558	

MISSOURI

	1982-83 Tuition and fees	1983-84 Tuition and fees	1983-84 Added out-of-state tuition
Avila C	3,551	3,700	

MISSOURI—Continued

	1982-83 Tuition and fees	1983-84 Tuition and fees	1983-84 Added out-of-state tuition
Baptist Bible C	1,150	1,030	
Burge Sch of Nursing	*	2,120	
Calvary Bible C	2,200	2,280	
Cardinal Glennon C	1,700	1,535	
Cardinal Newman C	3,960	3,980	
Central Bible C	1,770	1,915	
Central Christian C of the Bible	1,190	2,500	
Central Methodist C	*	4,250	
Central Missouri St U	630	738	696
Columbia C	4,045	4,495	
Conception Seminary C	*	2,450	
Cottey C	*	2,200	
Crowder C	310	340	780
Culver-Stockton C	3,700	4,040	
Drury C	3,650	4,020	
East Central C	*	480	660
Evangel C	2,447	2,667	
Fontbonne C	4,100	4,550	
Grandview Beauty C	*	899	
Hannibal-La Grange C	2,696	2,962	
Harris Stowe St C	*	650	585
Jefferson C	360	360	900
Kansas City Art Inst	5,700	6,150	
Kemper Military Sch & C	2,505	3,000	
Lincoln U	565	625	600
Lindenwood C's	4,600	4,600	
Linn Tech C	*	1,270	
Longview CC	600	600	810
Lutheran Medical Ctr Sch of Nursing	2,955	3,075	
Maple Woods CC	600	600	810
Maryville C St Louis	4,170	4,550	
Mineral Area C	330	390	470
Missouri Baptist C	2,600	2,600	
Missouri Inst of Tech	3,025	3,188	
Missouri S St C	600	700	700
Missouri Valley C	3,480	3,400	
Missouri W St C	780	880	880
Moberly Area JC	*	380	1,050
Nichols Career Ctr	860	925	
NE Missouri St U	480	620	620
NW Missouri St U	760	875	715
Ozark Beauty C	*	825	
Park C	3,640	3,740	
Penn Valley CC	600	600	810
Rockhurst C	3,950	4,270	
St Louis Christian C	1,575	1,600	
St Louis C of Pharmacy	2,600	2,915	
St Louis CC			
Florissant Valley	615	675	540
Forest Park	615	675	540
Meramec	615	675	540
St Louis Cons of Music	4,210	4,510	
St Louis U	4,690	4,990	
St Mary's C of O'Fallon	2,676	2,776	
St Paul's C	2,470	2,725	
Sch of the Ozarks	2,010	2,460	
SE Missouri St U	550	600	580
SW Baptist U	3,075	3,280	
SW Missouri St U	650	792	792
State Fair CC	*	380	700
Stephens C	5,175	5,650	
Tarkio C	5,450	3,750	
Trenton JC	360	360	672
U of Missouri			
Columbia	1,068	1,272	2,352
Kansas City	1,102	1,294	2,352
Rolla	1,165	1,403	2,352
St Louis	1,104	1,288	2,352
Washington U	7,179	7,958	
Webster C	3,975	4,275	
Westminster C	4,400	4,700	
William Jewell C	3,580	3,810	
William Woods C	4,540	5,050	

MONTANA

	1982-83 Tuition and fees	1983-84 Tuition and fees	1983-84 Added out-of-state tuition
Billings Voc-Tech Ctr	450	495	
Carroll C	2,878	3,140	
C of Great Falls	2,850	3,100	
Dawson CC	375	450	450
E Montana C	678	732	1,188
Flathead Valley CC	375	375	504
Great Falls Voc-Tech Ctr	450	495	818
Miles CC	338	390	525
Montana C of Mineral Science & Technology	616	675	1,548
Montana St U	728	782	1,548
N Montana C	607	661	1,188
Rocky Mountain C	3,239	3,499	
Salish Kootenai CC	*	765	
Western Montana C	633	697	1,188

NEBRASKA

	1982-83 Tuition and fees	1983-84 Tuition and fees	1983-84 Added out-of-state tuition
Bergan Mercy Hosp Radiology Tech	700	700	
Bahner C of Hairstyling	1,920	2,465	
Bellevue C	*	1,410	
Central CC	585	576	288
Chadron St C	786	846	510
College of St Mary	3,810	4,190	
Concordia Teachers C	3,283	3,580	
Creighton U	4,070	4,456	
Dana C	4,100	4,300	
Doane C	4,100	4,410	
Grace C of the Bible	2,480	2,540	
Kearney St C	805	928	510
Lincoln Sch of Commerce	*	1,890	
Mary Lanning Memorial Hosp Sch of Nursing	*	3,100	
McCook CC	*	530	135
Metro Tech CC	591	705	687
Mid Plains CC	450	525	135
Midland Lutheran C	3,850	4,290	
Nebraska Christian C	1,295	1,395	
Nebraska Indian CC	*	641	
Nebraska Wesleyan U	4,138	4,460	
Nebraska Western C	585	639	231
Northeast Tech CC	546	576	300
Omaha C Hlth Careers	3,172	3,492	
Platte Valley Bible C	960	990	
Southeast CC			
Fairbury-Beatrice	522	608	336
Lincoln	546	582	336
Milford	522	584	336

Continued on Following Page

Tuition

Continued from Preceding Page

	1982-83	1983-84	
	Tuition and fees	Tuition and fees	Added out-of-state tuition
NEBRASKA—Continued			
Union C	4,900	5,300	
U of Nebraska Sch of Tech Agriculture	769	802	672
Wayne State C	821	881	510
York C	2,150	2,300	
NEVADA			
American Sch of Diamond Cutting	*	3,250	
Prater Way C of Beauty	*	1,825	
Sierra Nevada C	2,250	2,250	
NEW HAMPSHIRE			
Castle JC	1,890	2,000	
Colby-Sawyer C	6,390	6,960	
Daniel Webster C	5,040	5,680	
Dartmouth C	8,190	9,145	
Franklin Pierce C	5,500	6,050	
Hawthorne C	*	5,370	
Hesser C	2,800	3,450	
Magdalen C	*	3,200	
New England C	5,990	6,190	
New Hampshire Barber C	*	2,100	
New Hampshire C	*	5,867	
Notre Dame C	3,100	3,700	
Rivier C	3,600	4,000	
St Anselm C	5,050	5,500	
Thomas More Inst of Liberal Arts	1,800	1,800	
White Pines C	3,400	3,400	
NEW JERSEY			
Assumption C for Sisters	*	1,200	
Atlantic CC	704	833	1,988
Bergen CC	*	810	1,950
Berkeley Sch	3,750	4,200	
Bloomfield C	4,470	4,890	
Brookdale CC	600	700	1,400
Caldwell C	3,450	3,875	
Camden County C	*	682	1,380
Centenary C	4,000	4,300	
C of St Elizabeth	4,200	4,685	
County C of Morris	700	850	1,730
Don Bosco C	2,860	3,010	
Drew U	6,685	7,210	
Englewood Hosp Nursing	1,650	1,650	
Essex County C	690	760	1,200
Fairleigh Dickinson U			
Edw Williams C	3,982	4,358	
Florham-Madison	4,826	5,274	
Rutherford	4,826	5,274	
Teaneck-Hackensack	4,826	5,274	
Felician C	2,550	3,160	
Georgian Court C	3,200	3,570	
Gloucester County C	*	650	2,490
Holy Name Hosp Sch of Nursing	1,895	2,005	
Hudson Area Hosp Sch of Radiologic Tech	1,600	1,900	
Hudson County CC	580	700	630
Mercer County CC	640	690	1,200
Metropolitan Tech Inst	2,940	2,572	
Monmouth C	5,182	5,380	
Mountainside Hosp Sch of Nursing	*	2,820	
Natural Motion Inst of Hair Design	2,800	3,000	
Northeastern Bible C	3,360	3,790	
Ocean County C	690	719	1,800
Princeton U	8,380	9,450	
Rider C	4,000	4,535	
St Barnabas Nuclear Medical Tech	1,000	1,500	
St Francis Med Ctr Sch of Nursing	*	992	
St Peter's C	4,047	4,103	
Salem CC	*	805	400
Somerset County C	*	754	1,950
Somerset County Tech Inst	700	750	
Stevens Inst of Tech	6,500	7,500	
Upsala C	4,718	5,340	
Westminster Choir C	5,370	6,060	
Winifred B. Baldwin Sch of Nursing	*	2,200	
NEW MEXICO			
C of Santa Fe	3,400	3,400	
C of the Southwest	1,070	1,192	
E New Mexico U	698	710	1,392
Roswell	400	412	688
Inst of Amer Indian Arts	*	150	
Kay Pardoll's Beauty C	*	2,340	
Lea Regional Hosp Sch of Radiologic Tech	200	200	
New Mexico Highlands U	531	527	1,392
New Mexico Inst of Mining and Tech	734	678	1,789
New Mexico JC	184	184	288
New Mexico Military Inst	613	806	710
New Mexico St U	798	798	1,786
Alamogordo	384	384	648
Carlsbad	346	346	648
Grants	360	360	648
N New Mexico CC	336	336	688
St John's C	6,700	7,200	
San Juan C	370	370	638
U of Albuquerque	2,970	2,620	
U of New Mexico	768	774	1,794
Gallup	*	348	648
Western New Mexico U	530	566	1,376
NEW YORK			
Acad of Aeronautics	*	3,596	
Adirondack CC		906	830
Albany Business C	2,500	3,200	
Albany C of Pharmacy	2,907	3,430	
Albany Medical Center Sch of Nursing	1,250	1,350	
Albany Occupational Ctr	*	1,600	
Alfred U	6,450	7,240	
American Acad of Dramatic Arts	2,975	3,300	
NEW YORK—Continued			
Bard C	8,880	9,630	
Barnard C	8,142	8,930	
Berkeley School	3,750	4,200	
Long Island	3,750	4,200	
New York	3,750	4,200	
Blake Business Sch	3,125	3,425	
BOCES Onondaga Madison Sch of Practical Nursing	*	1,825	
Boricua C	*	3,510	
Bramson ORT Tech Inst	2,150	2,875	
Briarcliffe Secretarial Sch	3,195	3,510	
Bryant-Stratton Bus Inst			
Buffalo	2,985	3,195	
Rochester	2,985	3,195	
Bryant-Stratton Powelson Bus Inst	2,985	3,195	
Buffalo Gen Hosp Sch of Nursing	2,454	2,804	
Canisius C	4,100	4,630	
Cathedral C Immaculate Conception	3,300	3,500	
Cattaraugus County BOCES-S Area Ctr Sch of Practical Nursing	*	1,812	
Cayuga County CC	990	1,140	1,040
Cazenovia C	4,465	4,780	
Central City Bus Inst	2,400	2,495	
Champlain Valley Physicians Hosp Med Ctr Sch of Radiologic Tech	*	500	
Clarkson C of Tech	6,350	7,350	
Colgate U	7,490	8,380	
C for Human Services	4,045	4,045	
C of Insurance	3,930	4,696	
C of Mt St Vincent	4,410	4,950	
C of New Rochelle	4,110	4,800	
New Resources	2,880	2,496	
C of St Rose	3,990	4,490	
Columbia U			
Columbia C	7,894	8,942	
Engineering & Applied Sci	7,922	8,992	
Sch of General Studies	6,990	8,288	
Sch of Nursing	7,770	8,850	
Concordia C	3,385	4,050	
Cooper Union	300	300	
Cornell U	7,950	8,900	
Crouse Irving Memorial Hosp Sch of Nursing	2,475	2,675	
Culinary Inst of Amer	*	5,340	
Daemen C	4,275	4,720	
Dominican C of Blauvelt	2,720	3,020	
Dowling C	4,620	4,645	
Dutchess CC	*	1,115	1,050
D'Youville C	4,050	4,420	
Eastman Sch of Music	7,304	8,200	
Elizabeth Seton C	2,925	3,550	
Elmira C	5,450	6,080	
Five Towns C	3,050	3,350	
Fordham U	4,950	5,590	
Friends World C	4,000	4,200	
Genesee CC	870	970	900
Glens Falls Hospital Sch of X-Ray Tech	*	200	
Hamilton C	7,950	8,600	
Hartwick C	6,425	7,100	
Hilbert C	2,820	3,140	
Hobart C	7,450	8,300	
Houghton C	4,207	4,390	
Inst of Design and Construction	1,820	1,820	
Interfaith Medical Ctr Sch of Nursing	*	2,296	
Island Drafting & Tech Inst	3,050	3,300	
Ithaca C	5,526	6,028	
Jamestown Business C	2,175	2,455	
Jamestown Sch of Practical Nursing	*	900	
Jewish Theol Sem	3,070	3,075	
Juilliard Sch	4,600	5,100	
JC of Albany	3,400	3,700	
Katharine Gibbs Sch	4,500	4,925	
Keuka C	4,960	5,560	
King's C	4,600	5,055	
Krissler Bus Inst	3,100	3,620	
Lab Inst of Merchandising	4,200	4,670	
Le Moyne C	4,360	4,700	
Le Ponto's Hairstyling and Beauty Sch	*	1,900	
Long Island U. Brooklyn Ctr	4,779	4,879	
Malcolm King: Harlem C Extension	1,344	2,146	
Manhattan C	4,200	4,700	
Manhattan Sch of Music	*	5,800	
Manhattanville C	6,440	7,080	
Mannes C of Music	4,575	5,000	
Maria C	2,530	2,470	
Maria Regina C	2,450	2,500	
Marist C	4,542	5,072	
Marymount C	4,895	5,365	
Marymount Manhattan C	4,070	4,450	
Mater Dei C	2,266	2,466	
Medaille C	3,060	3,690	
Mercy C	2,850	3,060	
Molloy C	3,700	3,850	
Monroe Business Inst	3,570	3,570	
Mount St Mary C	4,280	4,100	
Nazareth C of Rochester	4,200	4,550	
New London Acad Hairdrssing & Cosmetology	*	1,768	
New School for Social Research	5,310	5,900	
New York Inst of Tech	3,424	3,735	
New York Sch of Interior Design	3,970	4,530	
New York Studio for Drawing, Painting & Sculpture	*	1,800	
NEW YORK—Continued			
New York U	6,634	7,200	
Niagara U	4,170	4,900	
Nikolais/Louis Dance Theater Lab	*	1,040	
North Country CC	1,005	1,030	925
Nyack C	3,705	4,136	
Pace U			
New York City	4,360	4,380	
C of White Plains	4,360	4,380	
Pleasantville/Briarcliff	4,360	4,380	
Parsons Sch of Design	5,760	6,320	
Paul Smith's C	3,360	3,810	
Peninsula Hosp Center Sch, Radiologic Tech	*	1,400	
Polytechnic Inst of NY	6,310	7,100	
Long Island	6,310	7,100	
Pratt Inst	5,410	6,030	
Rensselaer Poly Inst	7,790	8,600	
Robert Fiance Hair Design Inst	*	3,721	
Roberts Wesleyan C	4,035	4,468	
Rochester Business Inst	2,550	2,795	
Rochester Inst of Tech	5,184	5,679	
Russell Sage C	5,400	5,910	
St Bonaventure U	4,305	4,615	
St Elizabeth Hosp Sch of Nursing	2,530	2,644	
St Francis Hosp Sch of Practical Nursing	*	2,250	
St John Fisher C	4,624	5,069	
St John's U	3,400	3,850	
St Joseph's C	3,020	3,320	
Suffolk	3,020	3,320	
St Lawrence U	6,800	7,900	
St Thomas Aquinas C	3,000	3,325	
Sarah Lawrence C	8,210	9,355	
Sch of Visual Arts	4,200	5,310	
Siena C	4,150	4,640	
Skidmore C	7,310	8,165	
State U of New York:			
A&T C at Alfred	1,155	1,455	1,300
A&T C at Canton	1,239	1,539	1,300
A&T C at Cobleskill	1,203	1,503	1,300
A&T C at Delhi	1,155	1,455	1,300
A&T C at Farmingdale	1,235	1,535	1,300
A&T C at Morrisville	1,330	1,630	1,300
Albany	1,220	1,520	1,300
Binghamton	1,180	1,480	1,300
Buffalo	1,240	1,540	1,300
C at Brockport	1,160	1,460	1,300
C at Buffalo	1,155	1,455	1,300
C at Cortland	1,155	1,455	1,300
C of Environmental Sci & Forestry	1,126	1,426	1,300
C at Fredonia	1,155	1,455	1,300
C at Geneseo	1,175	1,475	1,300
C at New Paltz	1,174	1,474	1,300
C at Old Westbury	1,110	1,410	1,300
C at Oneonta	1,245	1,545	1,300
C at Plattsburgh	1,115	1,415	1,300
C at Potsdam	1,155	1,455	1,300
C at Purchase	1,300	1,600	1,300
C of Tech Utica-Rome	1,180	1,480	1,300
Downstate Med Ctr	1,130	1,430	1,300
Empire State C	1,087	1,387	1,300
Health Sciences Ctr Stony Brook	1,155	1,455	1,300
Maritime C	1,247	1,547	1,300
Oswego	1,170	1,470	1,300
Stony Brook	1,155	1,455	1,300
Upstate Med Ctr	1,130	1,430	1,300
Stenotype Inst	*	2,600	
Sullivan County CC	*	1,166	2,100
Sutton Secretarial Sch	2,800	3,375	
Syracuse U	6,220	6,885	
Tobe-Coburn Sch for Fashion Careers	5,350	5,265	
Touro C	3,290	3,565	
Trocaire C	2,650	2,850	
Union C	7,399	8,164	
U of Rochester	7,060	7,875	
Utica Career Inst	1,360	1,500	
Utica C of Syracuse U	4,800	5,400	
Utica Sch of Commerce	*	2,475	
Vassar C	7,618	8,428	
Villa Maria C of Buffalo	2,500	2,760	
Wadhams Hall Sem-C	2,280	2,480	
Wagner College	4,212	5,230	
Wells C	6,830	7,625	
Westchester Business Inst	3,180	4,500	
Weymouth Business Inst	*	3,486	
William Smith C	7,450	8,300	
Wood Sch	4,200	4,700	
Yeshiva U	5,205	5,865	
NORTH CAROLINA			
American Business and Fashion Inst	*	2,700	
Atlantic Christian C	2,994	3,260	
Barber-Scotia C	*	3,000	
Belmont Abbey C	3,610	3,842	
Bennett C	*	2,900	
Blanton's JC	2,064	2,201	
Brevard C	1,870	2,920	
Catawba C	3,760	3,970	
Cecil's JC	*	2,090	
Charlotte Mem Hosp & Med Ctr Radiologic Tech Program	*	400	
Chowan C	2,380	2,615	
Davidson C	5,310	5,770	
Duke U	6,450	7,059	
Elon C	2,740	3,040	
Gardner-Webb C	3,260	3,530	
Greensboro C	3,410	3,820	
Guilford C	4,350	4,778	
Hardbarger JC of Bus	*	2,792	
High Point C	3,330	3,640	
John Robert Powers Sch of Fashion Car	*	4,047	
John Wesley C	1,574	1,724	
Johnson C Smith U	2,700	2,860	
Lees-McRae C	2,462	2,762	
Lenoir-Rhyne C	4,130	4,134	
Livingstone C	2,720	2,720	
Louisburg C	2,775	3,025	
Mars Hill C	3,450	3,650	
Meredith C	3,050	3,350	
NORTH CAROLINA—Continued			
Methodist C	3,280	3,720	
Montreat-Anderson C	2,590	2,776	
Mount Olive C	2,400	2,600	
NC Wesleyan C	*	3,920	
Peace C	2,400	2,600	
Pfeiffer C	3,450	3,700	
Piedmont Aerospace Inst	2,625	2,868	
Piedmont Bible C	2,140	2,316	
Queens C	4,200	4,600	
Rex Hosp Sch of Med Tech	800	800	
Roanoke Bible C	1,294	1,294	
Rutledge C of Winston-Salem	1,824	2,016	
Sacred Heart C	3,264	3,270	
St Andrews Presbyterian C	4,650	5,100	
St Mary's C	3,520	3,880	
Salem C	4,415	4,600	
Shaw U	*	2,500	
Sherrill's U of Cosmtlgy	*	2,495	
Wake Forest U	4,700	5,050	
Warren Wilson C	3,960	4,350	
Wingate C	2,596	2,773	
NORTH DAKOTA			
Bismarck JC	*	865	330
Dickinson St C	*	891	640
Interstate Business C	2,400	2,540	
Jamestown C	4,300	4,900	
Josef's Sch, Hair Design	*	1,895	
Mary C	2,840	3,110	
Mayville St C	705	858	515
Minot St C	*	756	648
North Dakota St Sch of Science	630	786	648
North Dakota St U	732	948	846
Bottineau	698	775	648
Northwest Bible C	1,700	2,000	
Standing Rock CC	750	770	
Trinity Bible Inst	1,986	2,159	
Turtle Mountain CC	*	540	
U of North Dakota	804	1,020	846
Williston	*	868	857
OHIO			
Acad, Communicative Art	2,250	2,600	
Antioch C	6,330	6,580	
Art Acad of Cincinnati	2,665	2,995	
Ashland C	4,626	5,706	
ATES Tech Inst	*	3,090	
Aultman Hosp Sch of Nursing	*	2,375	
Baldwin-Wallace C	5,181	5,577	
Belmont Tech C	750	750	150
Bethesda Hosp Sch of Nursing	2,619	2,990	
Bluffton C	4,320	4,563	
Borromeo C of Ohio	3,000	3,150	
Capital U	5,350	5,870	
Case Western Reserve U	6,450	7,300	
Cedarville C	3,207	3,168	
Central St U	1,290	1,290	1,011
Chatfield C	1,748	1,950	
Children's Hosp Med Ctr	*	600	
Choffin Sch of Practical Nursing	*	1,800	500
Cincinnati Bible Sem	2,037	3,984	
Cincinnati C Mortuary Sci	3,280	3,480	
Cincinnati Tech C	1,194	1,212	548
Circleville Bible C	2,492	2,500	
Cleveland Inst of Art	4,000	4,650	
Cleveland Inst of Music	6,101	6,865	
C of Mt St Joseph	3,776	3,850	
C of Wooster	*	7,335	
Columbus C Art & Des	4,140	4,540	
Columbus Tech Inst	935	1,008	990
Cuyahoga CC			
Eastern	*	810	900
Metropolitan	720	810	900
Western	*	810	900
Dayton Sch of Practical Nursing	*	950	
Deaconess Hosp Sch of Nursing	*	2,721	
Defiance C	4,070	4,400	
Denison U	6,670	7,530	
DeVry Inst of Tech	*	3,188	
Euclid Gen Hosp Sch of Radiologic Tech	*	500	
Fairview General Hosp Sch of Nursing	870	990	900
Findlay C	4,425	4,785	
Franklin U	2,100	2,430	
Heidelberg C	5,450	6,230	
Hiram C	5,865	6,659	
Jane Addams Sch of Practical Nursing	*	1,655	
Jefferson Tech C	585	585	495
John Carroll U	3,968	4,352	
Kenyon C	7,090	7,905	
Kettering C of Med Arts	2,856	2,200	
Lakeland CC	*	945	1,717
Lima Tech C	*	945	1,050
Lorain Business C	*	2,525	
Lorain County CC	925	1,013	1,845
Lourdes C	1,700	2,000	
M.B. Johnson Sch of Nursing	*	1,866	3,784
Malone C	4,306	4,523	
Marietta C	5,850	6,500	
Marion Tech C	900	1,044	1,512
Miami Valley Hosp Sch of Nursing	2,564	3,111	2,062
Miami-Jacobs JC Bus	2,321	2,510	
Mount Union C	6,045	6,630	
Mt Vernon Nazarene C	2,999	3,309	
Muskingum Area Tech C	*	900	450
Muskingum C	5,619	6,030	
Nationwide Beauty Acad	*	2,495	
Northwest Tech C	1,080	1,296	1,188
Northwestern Business C & Tech Center	*	3,050	
Notre Dame C of Ohio	3,250	3,500	
Oberlin C	7,750	8,640	
Ohio Diesel Tech Inst	3,100	3,225	
Ohio Dominican C	3,990	4,390	
Ohio Inst of Photography	3,240	3,528	
Ohio Northern U	4,710	5,040	
OHIO—Continued			
Ohio Wesleyan U	6,300	6,785	
Otterbein C	5,364	6,009	
Owens Tech C	840	936	840
Penta County Voc Sch	*	1,370	
Pontifical C Josephinum	2,950	2,350	
Practical Nursing Sch Buckeye Hills Career Ctr	1,245	1,710	200
Providence Hospital Sch of Nursing	2,360	2,655	
RETS Tech Center	*	3,109	
Rio Grande C and CC	*	900	2,250
Riverside Hosp Sch of Radiologic Tech	*	500	
St Alexis Hosp Sch of Nursing	1,230	1,865	
Sandusky Sch of Practical Nursing	925	1,800	85
Shawnee St CC	900	990	75
Southern Ohio C	2,340	2,565	
Terra Tech C	930	945	1,080
Tiffin U	2,500	2,740	
Toledo Hosp Sch of Nursing	*	2,369	765
U of Akron	1,430	1,560	1,680
U of Dayton	3,910	4,330	
U of Steubenville	4,170	4,420	
Urbana C	3,300	3,552	
Ursuline C	3,150	3,975	
Walsh C	3,628	3,560	
Washington Tech C	990	990	720
West Side Inst of Tech	*	3,020	
Wilberforce U	2,560	3,440	
Wilmington C	4,425	4,935	
Wittenberg U	6,266	7,131	
Wright State U	1,470	1,623	1,623
Western Ohio Branch	1,311	1,449	1,623
Xavier U	4,150	4,600	
OKLAHOMA			
Bacone C	*	1,794	
Bartlesville Wesleyan C	2,860	3,170	
Bethany Nazarene C	2,375	2,816	
Flaming Rainbow U	2,120	2,660	
Hillsdale Free Will Baptist C	1,275	1,475	
Midwest Christian C	1,360	1,360	
Oklahoma Baptist U	2,505	2,646	100
Oklahoma Christian C	2,200	2,500	
Oklahoma City U	*	2,950	
Oral Roberts U	3,610	3,680	
Oscar Rose JC	*	367	703
Phillips U	*	3,144	
St Gregory's C	*	2,175	
Seminole JC	*	427	705
SW C of Christian Ministries	1,500	1,500	
Spartan School of Aeronautics	*	4,115	
U of Tulsa	3,270	3,770	
OREGON			
Bassist C	3,950	4,350	
Blue Mountain CC	540	540	1,620
Central Oregon CC	540	540	2,412
Chemeketa CC	540	600	1,650
Clackamas CC	*	600	1,590
Clatsop CC	576	576	1,656
Columbia Christian C	2,655	3,402	
Concordia C	3,640	4,090	
Eugene Bible C	*	2,010	
George Fox C	4,980	5,145	
Judson Baptist C	3,600	3,900	
Lane CC	565	600	1,881
Lewis & Clark C	6,444	7,008	
Linfield C	5,030	5,660	
Linn-Benton CC	612	612	1,944
Marylhurst C for Lifelong Learning	3,825	4,275	
Milwaukee Beauty Sch	*	2,300	
Modern Beauty C	2,040	3,080	
Mount Angel Seminary	*	2,415	
Mount Hood CC	585	615	2,445
Multnomah Sch of the Bible	2,990	3,280	
Northwest Christian C	3,340	3,606	
Oregon Polytech Inst	2,365	2,730	
Pacific NW C of Art	3,310	3,700	
Pacific U	5,505	5,755	
Portland CC	540	540	2,385
Reed C	7,160	7,520	
Rogue CC	*	576	1,656
Sacred Heart General Hosp	900	900	
SW Oregon CC	540	600	1,200
Treasure Valley CC	570	660	600
Umpqua CC	612	660	2,331
U of Portland	4,920	5,381	
Warner Pacific C	3,915	4,590	
Western Baptist C	3,864	3,873	
Western States Chiropractic C	4,665	5,271	
Willamette U	5,580	6,020	
PENNSYLVANIA			
Acad of New Church	1,560	1,740	
A.D.I.O. Inst of Straight Chiropractic	*	4,450	
Airco Tech Inst	*	4,245	
Albright C	5,725	6,295	
Allegheny C	5,835	6,480	
Allentown C of St Francis de Sales	4,060	4,400	
Alliance C	3,060	3,290	
Alvernia C	2,200	2,520	
American Inst of Drafting	*	3,724	
Antonelli Inst of Art & Photography	3,170	3,570	
Ardom Beauty Acad	*	2,200	
Art Inst of Pittsburgh	3,685	4,065	
Baptist Bible C	3,152	3,515	
Beaver C	5,520	5,920	
Berean Inst	1,090	1,300	
Bloomsburg St C	1,594	1,608	1,110
Bryn Mawr C	7,715	8,480	
Bucknell U	7,350	8,330	
Bucks County CC	892	1,032	3,136
Butler County CC	996	1,044	2,400
Cabrini C	4,120	4,440	
California St C	1,652	1,724	1,110

PENNSYLVANIA—Continued

	1982-83 Tuition and fees	1983-84 Tuition and fees	1983-84 Added out-of-state tuition
Cambria-Rowe Bus C	2,425	2,770	
Carlisle Hosp School of Radiologic Tech	*	150	
Carlow C	4,790	5,310	
Carnegie-Mellon U	6,350	7,550	
Cedar Crest C	5,100	5,600	
Center for Degree Studies	1,600	1,600	
Central Pa Bus School	2,475	2,595	
Centre Bus School	2,535	2,725	
Chatham C	5,512	6,030	
Chestnut Hill C	*	3,450	
Chestnut Hill Hospital Sch of Nursing	2,040	2,405	
Cheyney St C	1,640	1,650	1,110
Churchman Bus School	*	2,095	
Clarion St C	1,875	1,648	1,110
Venango	1,875	1,632	1,110
C Misericordia	3,565	3,800	
CC of Beaver County	1,040	1,070	2,580
CC of Philadelphia	*	946	1,824
Community Gen Hosp Sch of Radiologic Tech	100	100	
Community Med Center Sch of Nursing	*	3,195	
Crozer-Chester Center Radiography Program	350	500	
Dean Inst of Tech	2,725	3,265	
Delaware County CC	*	750	368
Delaware Valley C of Science & Agriculture	4,300	4,600	
Dickinson C	6,715	7,640	
Drexel U	5,038	5,225	
Duff's Business Inst	3,000	4,230	
Duquesne U	4,830	5,130	
E Stroudsburg St C	1,600	1,660	1,110
Eastern C	4,470	5,230	
Edinboro St C	1,630	1,652	1,110
Elizabethtown C	*	5,395	
Franco Beauty Acad New Kensington	*	1,800	
Franklin & Marshall C	6,550	7,530	
Gannon U	*	3,820	
Geneva C	4,220	4,420	
Germantown Hosp & Med Center Sch of Nursing	*	3,484	
Gettysburg C	6,000	7,060	
Gratz C	*	550	
Greensburg Inst of Tech	2,998	3,283	
Grove City C	2,620	2,880	
Gwynedd-Mercy C	3,450	4,250	
Hahnemann U Sch Allied Health Professions	*	4,350	
Harcum JC	3,100	3,630	
Harrisburg Area CC	708	708	1,480
Haverford C	8,080	8,740	
Holy Family C	3,300	3,600	
Immaculata C	3,040	3,467	
Indiana U of Pa	1,630	1,654	1,110
Jameson Memorial Hosp Sch of Nursing	*	7,270	
Juniata C	5,361	5,985	
Keystone JC	3,750	3,966	
Keystone Secretarial & Business Admin Sch	*	2,380	
King's C	4,100	4,500	
Kutztown St C	1,592	1,604	1,110
La Roche C	3,170	3,425	
La Salle C	4,150	4,540	
Lackawanna JC	2,370	2,550	
Lafayette C	7,025	7,725	
Lancaster Bible C	3,200	3,526	
Lankenau Hosp Sch of Nursing	*	5,159	
Lebanon Valley C	4,790	5,360	
Lehigh County CC	1,040	1,040	2,460
Lehigh U	7,200	8,000	
Lincoln Tech Inst	*	3,579	
Lincoln U	1,730	1,830	800
Lock Haven St C	1,602	1,604	1,110
Luzerne County CC	*	1,058	2,348
Lycoming C	4,980	5,580	
Manor JC	3,050	3,250	
Mansfield St C	1,596	1,676	1,110
Marywood C	2,970	3,150	
McCarrie Schls of Health Sciences & Tech	3,500	4,200	
McKeesport Hosp Sch of Med Tech	1,110	1,272	
Mercyhurst C	4,312	4,773	
Messiah C	3,950	4,460	
Millersville St C	1,598	1,598	1,110
Montefiore Hosp Sch of Rad Tech	400	400	
Moore C of Art	4,375	5,575	
Moravian C	4,950	6,275	
Mount Aloysius JC	*	4,190	
Muhlenberg C	5,975	6,585	
Natl Sch of Health Tech	2,810	3,125	
Neumann C	3,302	3,664	
New Sch of Music	4,035	4,355	
Northampton County Area CC	1,080	1,200	2,580
NE Christian JC	2,720	3,040	
Peirce JC	*	3,400	
Pa Tech Inst	2,780	3,050	
Penn Acad of Fine Arts	2,200	2,400	
Pennco Tech Inst	2,925	3,217	
Philadelphia C of Art	5,800	6,415	
Philadelphia C of Bible	3,380	3,682	
Philadelphia C of Pharmacy & Science	4,400	5,025	
Philadelphia C of Textiles & Science	4,000	4,400	
Philadelphia Printing Sch	4,410	4,840	
Pinebrook JC	2,770	3,425	
Pittsburgh Beauty Acad	*	2,885	
Pittsburgh Tech Inst	*	4,225	
Point Park C	4,335	4,335	
Pottsville Hosp Sch of Nursing	*	2,371	
Reading Area CC	*	1,050	1,980
Reading Hosp Sch of Nursing	*	1,605	
Robert Morris C	2,580	2,880	
Robert Packer Hosp Sch of Nursing	2,040	2,245	
Rosemont C	4,715	5,110	

PENNSYLVANIA—Continued

	1982-83 Tuition and fees	1983-84 Tuition and fees	1983-84 Added out-of-state tuition
Sacred Heart Hosp Diagnostic Radiography	*	400	
St Charles Borromeo Seminary	*	2,615	
St Francis C	3,910	4,534	
St Joseph's U	4,220	4,680	
St Vincent C	4,224	4,546	
Sch of Computer Tech	*	3,700	
Seton Hill C	4,260	4,650	
Shippensburg St C	1,644	1,684	1,110
Slippery Rock St C	1,668	1,680	1,110
S Hills Business Sch	*	2,880	
Spring Garden C	3,950	4,350	
Susquehanna U	5,296	5,815	
Swarthmore C	6,250	8,430	
Thiel C	4,941	5,200	
Thomas Jefferson U C of Allied Health Science	5,500	6,200	
Tracey-Warner Sch	2,250	2,335	
Triangle Inst of Tech	*	3,127	
Erie Center	*	3,370	
Greensburg	3,370	3,445	
Uniontown Hosp Sch of Nursing	*	2,171	2,071
United Wesleyan C	2,900	3,540	
U of Pennsylvania	8,000	8,880	
U of Pittsburgh	*	2,528	2,420
Bradford	*	2,430	2,420
Greensburg	*	2,360	2,330
Johnstown	*	2,500	2,420
Titusville	*	2,340	2,260
U of Scranton	3,670	3,920	
Ursinus C	5,150	5,605	
Vale Tech Inst	*	4,912	
Valley Forge Christian C	*	2,275	
Valley Forge Military JC	*	5,010	
Villa Maria C	3,890	4,500	
Villanova U	5,150	5,600	
Washington & Jeffeerson C	6,120	6,670	
Waynesburg C	4,760	5,010	
Welding Training & Testing Inst	*	3,494	
West Chester St C	1,604	1,606	1,110
Westminster C	4,900	5,500	
Widener U	*	5,760	
Wilkes C	4,650	5,100	
Williamsport Area CC	*	1,122	2,716
Wilson C	5,418	6,072	
York C	2,796	2,964	

RHODE ISLAND

	1982-83 Tuition and fees	1983-84 Tuition and fees	1983-84 Added out-of-state tuition
Barrington C	5,085	5,715	
Brown U	8,380	9,405	
Bryant C	3,750	4,175	
CC of Rhode Island	630	690	
John's Creative Sch of Cosmetology	2,350	2,350	
Johnson & Wales C	3,945	4,230	
New England Inst of Tech	3,750	4,495	
Newport Hosp Sch of Nursing	*	3,200	
Ocean State Bus Inst	2,450	2,850	
Providence C	5,317	5,867	
Rhode Island C	*	1,075	2,250
Rhode Island Hosp Sch of Respiratory Therapy	1,125	1,725	
Rhode Island Sch of Design	6,700	7,570	
Rhode Island Trades Shops Sch	4,318	4,818	
Roger Williams C	*	5,142	
Salve Regina-Newport C	4,800	5,350	
U of Rhode Island	1,543	1,738	3,382
Warwick Acad of Beauty Culture	2,350	2,350	

SOUTH CAROLINA

	1982-83 Tuition and fees	1983-84 Tuition and fees	1983-84 Added out-of-state tuition
Aiken Tech C	525	450	280
Allen U	2,510	2,810	
Anderson C	2,520	2,810	
Beaufort Tech C	480	640	75
Benedict C	*	2,936	
Central Wesleyan C	3,520	3,990	
Citadel Military Acad	*	3,371	1,948
Claflin C	*	2,652	
Clemson U	*	1,652	1,928
Clinton JC	875	850	
Coker C	3,930	4,315	
Columbia Bible C	2,605	2,860	
Columbia C	2,100	4,200	
Converse C	*	4,575	
Denmark Tech C	500	465	250
Erskine C	4,300	4,480	
Florence Darlington Tech C	525	820	500
Francis Marion C	805	940	940
Furman U	4,284	4,828	
Greenville Tech C	390	540	398
Horry-Georgetown Technical C	450	450	450
Lander C	1,150	1,250	600
Limestone C	3,940	4,300	
Midlands Tech C	600	600	600
Newberry C	*	4,500	
N Greenville C	2,450	2,690	
Orangeburg Calhoun Tech C	*	530	204
Presbyterian C	4,225	4,580	
Rutledge C Columbia	1,800	1,840	
Spartanburg	1,440	1,512	
South Carolina St C	810	900	900
Spartanburg Methodist C	2,500	2,600	
Sumter Area Tech C	450	540	108
Tri-County Tech C	480	480	480
Voorhees C	2,330	2,562	
Williamsburg Tech C	*	375	
Wofford C	4,295	4,595	

SOUTH DAKOTA

	1982-83 Tuition and fees	1983-84 Tuition and fees	1983-84 Added out-of-state tuition
Augustana C	4,680	5,220	
CC of N Central U Ctr	2,372	2,422	
Dakota St C	*	1,120	900
Dakota Wesleyan U	*	3,530	
Freeman JC	2,900	3,100	
Mount Marty C	3,925	3,925	

SOUTH DAKOTA—Continued

	1982-83 Tuition and fees	1983-84 Tuition and fees	1983-84 Added out-of-state tuition
National C	3,675	4,250	
Northern St C	*	1,086	874
Presentation C	3,380	3,380	
Sinte Gleska C	*	720	
Sioux Falls C	3,510	3,900	
South Dakota Sch of Mines & Tech	*	1,157	1,038
South Dakota St U	*	1,131	1,086
Stewart School of Hairstyling	2,055	2,522	
U of South Dakota	*	1,250	1,159
Yankton C	3,960	4,240	

TENNESSEE

	1982-83 Tuition and fees	1983-84 Tuition and fees	1983-84 Added out-of-state tuition
American Baptist C of ABT Sem	1,014	1,014	
Bethel C	2,175	2,400	
Bryan C	2,800	3,300	
Carson-Newman C	*	3,308	100
Christian Bros C	3,460	3,666	
Cooper Inst	*	2,155	
Cumberland Sch of Med Tech	3,350	3,550	
David Lipscomb C	2,295	2,742	
Draughon's JC of Business: Nashville	2,160	2,435	
Fisk U	4,900	4,200	
Free Will Bapt Bible C	1,670	1,798	
Freed-Hardeman C	2,700	2,850	
Hiwassee C	*	1,995	
Johnson Bible C	1,440	1,600	
King C	3,360	3,620	
Knoxville Bus C	1,920	2,160	
Knoxville C	*	3,096	
Lambuth C	3,270	3,520	
Lee C	2,287	2,461	
LeMoyne-Owen C	2,300	2,470	
Lincoln Memorial U	2,250	2,280	
Martin C	*	2,200	
Maryville C	4,000	4,385	
Memphis Acad of Arts	2,730	3,100	
Methodist Hospital Sch of Nursing	*	1,133	
Mid-South Bible C	2,330	2,498	
Milligan C	3,200	3,598	
Morristown C	1,903	2,150	
Southern C of Optometry	*	7,896	
Southern C of Seventh-day Adventists	*	4,540	
Southwestern at Memphis	5,200	5,670	
Tennessee Inst of Electronics	2,474	2,630	
Tenn Sch of Beauty	1,200	1,400	
Tennessee Temple U	1,990	2,182	
Tennessee Wesleyan C	*	3,000	
Tomlinson C	1,910	2,080	
Trevecca Nazarene C	2,780	3,030	
Tusculum C	3,400	3,640	
Union U	2,270	2,450	
U of the South	6,520	7,185	
Vanderbilt U	6,230	7,100	
West Tennessee Bus C	*	3,375	

TEXAS

	1982-83 Tuition and fees	1983-84 Tuition and fees	1983-84 Added out-of-state tuition
Abilene Christian U	2,820	2,820	
A&C C of Beauty	*	1,695	
Alvin CC	160	144	370
Amarillo C	255	255	414
American Tech U	1,930	2,128	
Angelina C	252	252	280
Angelo St U	400	424	1,080
Arlington Baptist C	*	1,515	
Austin C	4,035	4,635	
Austin CC	438	510	810
Bauder Fashion C	3,710	3,710	
Baylor U	2,844	3,095	
Bee County C	222	222	1,078
Bishop C	*	2,720	2,720
Brazosport C	120	186	390
Brookhaven C	*	240	1,010
Central Texas C	280	280	420
Cisco JC	*	430	320
Clarendon C	310	250	280
C of the Mainland	135	135	300
Concordia Lutheran C	2,200	2,400	
Cooke County C	250	295	390
Corpus Christi St U	384	384	1,080
Dallas Baptist C	2,840	2,840	
Dallas Bible C	*	2,508	
Dallas Christian C	1,480	1,686	
Del Mar C	230	230	400
DeVry Inst of Tech	*	3,300	
East Texas Baptist C	1,995	2,610	
East Texas St U	*	450	1,080
East Texas U at Texarkana	*	300	1,080
Eastfield C	240	240	1,010
El Centro C	*	240	1,010
El Paso County CC	*	316	908
Frank Phillips C	*	620	220
Galveston C	120	120	280
Gulf Coast Bible C	2,512	2,790	
Hardin-Simmons U	2,760	2,950	
Henderson County JC	168	198	330
Hill JC	500	500	500
Houston Baptist U	3,348	3,348	
Houston CC	*	551	1,140
Howard County JC	250	250	280
Howard Payne U	2,100	2,300	
Huston-Tillotson C	2,412	2,672	
Incarnate Word C	3,160	3,648	
Jacksonville C	1,550	1,560	
Killeen Beauty C	1,035	1,287	
Lamar U	450	450	1,080
Laredo St U	*	285	1,080
LeTourneau C	3,536	3,796	
Lon Morris C	2,580	2,750	
Lubbock Christian C	2,592	3,025	
McLennan CC	240	240	552
McMurry C	2,750	2,750	
Midland C	*	340	500
Midwestern St U	480	480	1,075
Miss Wade's Fashion C	*	3,600	
Mountain View C	240	230	940
Navarro C	392	432	984
N Harris County C	*	173	
N Texas St U	450	450	1,050

TEXAS—Continued

	1982-83 Tuition and fees	1983-84 Tuition and fees	1983-84 Added out-of-state tuition
Ogle Sch of Hair Design	1,350	1,625	
Our Lady of the Lake U	3,074	3,434	
Pan American U	*	360	1,080
Panola JC	180	188	299
Paris JC	*	350	250
Paul Quinn C	*	1,888	
Prairie View A&M U	*	475	1,296
Rice U	3,700	3,900	
Richland C	240	240	1,010
St Edward's U	3,100	3,370	
St Mary's U	3,450	3,900	
Sam Houston St U	460	460	1,080
San Antonio C	214	214	320
San Jacinto C Central Campus	170	170	280
North Campus	170	170	280
Schreiner C	*	3,690	
South Plains C	300	300	250
Southern Bible C	1,910	1,950	
S Methodist U	5,650	6,316	
SW Adventist C	4,510	4,744	
SW Christian C	*	2,202	
SW Inst of Fashion Merch & Design	2,525	2,825	
SW Texas JC	*	306	960
SW Texas St U	450	480	1,080
Southwestern JC	1,652	1,820	
Southwestern U	3,500	4,300	
Stephen F Austin St U	500	450	1,080
Sul Ross St U	372	668	1,080
Tarleton St U	*	480	1,080
Tarrant County JC	140	172	1,080
Temple JC	275	275	1,200
Texarkana CC	*	250	260
Texas A&I U	375	420	1,080
Texas A&M U	480	480	1,080
Galveston	372	320	1,080
Texas Christian U	4,110	4,630	
Texas C	*	2,385	
Texas C of Medical & Dental Careers	2,525	2,795	
Texas Lutheran C	2,800	3,000	
Texas Southern U	*	472	1,080
Texas Southmost C	256	305	813
Texas St Tech Inst Amarillo	346	362	435
Harlingen	*	362	720
Rolling Plain	*	362	720
Waco	346	362	720
Texas Tech U	432	460	1,080
Texas Wesleyan C	3,000	3,530	
Texas Woman's U	390	390	1,080
Trinity U	4,021	4,680	
Tyler JC	120	120	370
U of Dallas	3,600	4030	
U of Houston	420	440	1,080
Clear Lake City	420	400	1,080
Downtown C	420	420	1,080
Victoria	312	312	1,080
U of St Thomas	3,000	3,290	
U of Texas Arlington	440	440	1,080
Austin	420	420	1,080
Dallas	450	550	1,080
El Paso	396	396	1,080
Health Sci Ctr, Dallas	240	240	1,080
Med Branch, Galveston	215	288	1,080
Permian Basin	350	370	1,080
San Antonio	450	450	1,080
Sch of Nursing Galveston	132	262	
Tyler	*	420	1,080
Vernon Regional JC	267	327	1,080
Victoria C	150	150	370
Weatherford C	*	200	300
West Texas St U	490	500	1,080
Western Texas C	250	250	280
Wharton County JC	263	356	1,700
Wiley C	*	2,430	

UTAH

	1982-83 Tuition and fees	1983-84 Tuition and fees	1983-84 Added out-of-state tuition
Brigham Young U	1,220	1,340	
Hollywood Beauty C	860	1,300	
LDS Business C	*	1,280	
Stevens Henager C	2,502	2,502	
U of Utah	960	1,050	1,530
Utah St U	849	915	1,530
Utah Tech C Provo	627	687	1,101
Salt Lake City	*	720	1,290
Weber St C	762	810	1,380
Westminster C	3,290	3,770	

VERMONT

	1982-83 Tuition and fees	1983-84 Tuition and fees	1983-84 Added out-of-state tuition
Bennington C	9,620	10,750	
Burlington C	3,460	3,750	
Castleton St C	1,650	1,837	1,723
Champlain C	3,595	3,950	
C of St Joseph the Provider	3,330	4,040	
CC of Vermont	900	1,120	1,050
Goddard C	*	6,500	
Green Mountain C	5,255	5,507	
Johnson St C	1,625	1,800	2,030
Lyndon St C	1,609	1,800	2,030
Marlboro C	6,900	7,730	
New England Culinary Inst	*	7,430	
Norwich U	*	7,000	
Vermont C	*	5,700	
St Michael's C	5,505	5,991	
Sch for Intl Training	5,600	5,982	
S Vermont C	3,450	3,480	
Sterling Inst	5,000	5,200	
Thompson Sch Practical Nursing	832	1,764	550
Trinity C	4,205	4,705	
U of Vermont	2,466	2,621	3,879
Vermont Tech C	1,914	2,176	1,624

VIRGINIA

	1982-83 Tuition and fees	1983-84 Tuition and fees	1983-84 Added out-of-state tuition
Alexandria Hosp Sch of Nursing	*	1,993	909
Averett C	2,810	3,550	
Blue Ridge CC	558	611	2,003
Bluefield C	1,990	2,276	
Bridgewater C	4,080	4,315	
Central Virginia CC	558	608	2,003
Christopher Newport C	1,235	1,370	680

VIRGINIA—Continued

	1982-83 Tuition and fees	1983-84 Tuition and fees	1983-84 Added out-of-state tuition
Clinch Valley C of U of Va	1,064	1,104	576
Coastal Business C	*	3,650	
C of William & Mary	1,574	1,776	2,914
Commonwealth C	*	2,455	
Dabney Lancaster CC	562	617	2,003
Danville CC	558	608	2,003
Eastern Mennonite C	4,137	4,356	
Eastern Shore CC	563	608	2,003
Emory & Henry C	3,300	3,585	
Ferrum C	*	3,950	
George Mason U	1,176	1,380	1,284
Germanna CC	562	614	2,003
Hampden-Sydney C	5,875	6,520	
Hampton Inst	3,215	3,430	
Hollins C	6,325	6,575	
J S Reynolds CC	562	612	2,003
James Madison U	1,506	1,660	930
John Tyler CC	558	608	2,003
Liberty Baptist C	2,270	2,270	
Longwood C	1,565	1,615	750
Lord Fairfax CC	*	623	2,003
Lynchburg C	4,900	5,350	
Mary Baldwin C	4,735	5,250	
Mary Washington C	1,048	1,198	1,312
Marymount C	4,200	4,600	
Morven Park Intl Equestrian Inst	4,874	4,874	
Mountain Empire CC	558	608	2,003
New River CC	563	631	2,003
Norfolk C	*	2,455	
Norfolk Gen Hosp Sch of Prof Nursing	*	861	95
Norfolk St U	812	923	680
Northern Virginia CC	558	608	2,003
Old Dominion U	1,114	1,236	1,092
Paul D Camp CC	*	608	2,003
Piedmont Va CC	558	608	2,003
Portsmouth School of Lab Technicians	400	650	
Radford U	1,254	1,485	750
Randolph-Macon C	5,000	5,500	
Randolph-Macon Woman's C	5,900	6,580	
Rappahannock CC	562	608	2,003
Richard Bland C	790	830	1,230
Riverside Hosp Sch of Professional Nursing	*	1,640	
Roanoke C	4,750	5,200	
St Paul's C	*	2,950	
Shenandoah C and Conservatory of Music	4,190	5,000	
Southern Seminary JC	3,975	4,685	
Southside Virginia CC	558	608	2,003
SW Virginia CC	563	613	2,003
Sweet Briar C	6,730	7,280	
Thomas Nelson CC	558	608	2,003
Tidewater CC	558	608	2,003
U of Richmond	5,525	6,120	
U of Virginia	1,350	1,570	2,180
Va Commonwealth U	1,216	1,448	1,520
Va Highlands CC	*	608	2,003
Virginia Intermont C	3,350	3,540	
Virginia Military Inst	2,095	2,445	1,960
Va Poly Inst & St U	1,281	1,401	1,515
Virginia St U	1,303	1,430	970
Virginia Wesleyan C	4,100	4,390	
Virginia Western CC	558	608	2,003
Washington Business Sch of N Virginia	4,200	4,500	
Washington & Lee U	5,460	5,870	
Winchester Mem Hospital Sch of Radiologic Tech	1,500	1,500	
Wytheville CC	558	613	2,003

WASHINGTON

	1982-83 Tuition and fees	1983-84 Tuition and fees	1983-84 Added out-of-state tuition
Bellevue CC	519	579	1,701
Clark C	519	579	1,701
Columbia Basin C	*	581	1,704
Cornish Inst	3,750	4,500	
E Washington U	942	1,017	2,469
Edmonds CC	519	587	1,704
Everett CC	519	579	1,704
Evergreen St C	942	1,017	2,469
Fort Steilacoom CC	513	573	1,704
Gonzaga U	4,700	5,300	
Grays Harbor C	519	579	1,704
Green River CC	519	579	1,704
Griffin Bus C	*	3,633	
Griffin C	2,307	3,633	
Heritage C	2,850	2,300	
Highline CC	519	581	1,704
Lake Washington Voc-Tech Inst	*	618	
Longview Business C	*	3,495	
Lutheran Bible Inst of Seattle	2,208	2,708	
Modern Bus C	3,345	3,495	
North Seattle CC	506	566	1,704
Northwest C	2,745	3,208	
Olympia Tech CC	519	579	1,518
Olympic C	519	581	1,704
Pacific Lutheran U	4,950	5,310	
Puget Sound C of the Bible	2,310	2,250	
Ron Bailie Sch of Broadcasting Seattle	4,990	5,590	
Spokane	*	5,590	
St Martin's C	4,422	5,110	
Seattle Central CC	506	560	1,704
Seattle Pacific U	4,463	4,845	
Seattle U	4,725	5.085	
Shoreline CC	517	570	1,704
S Seattle CC	*	320	920
Spokane Tech Inst	*	2,960	
Swedish Hosp Sch of Rad Therapy Tech	110	1,000	
U of Puget Sound	5,480	5,950	
Walla Walla C	5,169	5,424	
Walla Walla CC	519	579	1,731
Washington St U	1,176	1,305	1,950
Wenatchee Valley C	525	581	1,704
Western Washington U	942	1,017	2,469
Whitman C	5,850	6,380	
Whitworth C	5,235	5,590	
Yakima Valley CC	519	581	1,704

Continued on Following Page

Tuition *Continued from Preceding Page*

	1982-83	1983-84	
	Tuition and fees	Tuition and fees	Added out-of-state tuition
WEST VIRGINIA			
Alderson Broaddus C	3,970	4,436	
Appalachian Bible C	2,150	2,300	
Beckley C	912	960	
Bethany C	5,800	5,910	
Bluefield State C	*	750	1,370
Concord C	574	754	1,370
Davis & Elkins C	4,415	4,808	
Fairmont St C	590	754	1,370
Glenville St C	564	754	1,370
James Rumsey Voc-Tech Center	*	600	100
Marshall U	650	847	1,551
Ohio Valley C	2,226	2,440	
Ohio Valley Gen Hosp Sch of Nursing	*	1,785	
Parkersburg CC	440	520	1,320
Salem C	3,710	4,188	
Shepherd C	576	746	1,370
S West Virginia CC			
Logan	*	520	1,320
Williamson	*	520	1,320
U of Charleston	3,350	3,498	
West Liberty St C	604	754	1,370
West Virginia Inst of Tech	594	754	1,370
West Virginia N CC	440	520	1,320
West Virginia St C	600	762	1,320
West Virginia U	840	1,090	1,850
Potomac St C	602	760	1,370
West Va Wesleyan C	3,986	4,166	
Wheeling C	4,350	4,370	
WISCONSIN			
Alverno C	3,850	4,116	
Beloit C	6,586	7,056	
Blackhawk Tech Inst	600	610	2,295
Cardinal Stritch C	3,600	3,990	
Carroll C	5,330	6,080	
Carthage C	4,651	4,957	
Concordia C	3,300	3,650	
District One Tech Inst	600	600	2,493
Edgewood C	3,450	3,800	
Fox Valley Tech Inst	989	650	2,337
Gateway Tech Inst	*	489	2,337
Geneva Acad of Beauty	*	2,050	
WISCONSIN—Continued			
Holy Redeemer C	2,250	2,485	
Janesville Acad of Beauty Culture	1,775	2,050	
Lakeland C	4,455	4,455	
Lakeshore Tech Inst	465	610	2,500
Lawrence U	6,675	7,176	
Madison Area Tech C	660	540	2,337
Madison Business C	2,040	2,160	
Marian C	3,210	3,850	
Marquette U	4,450	4,855	
Mid-State Tech Inst	*	584	2,337
Milwaukee Area Tech C	667	667	1,296
Milwaukee County General Hosp Sch of Nursing	1,910	1,521	
Milwaukee Inst of Art & Design	2,150	2,900	
Milwaukee Sch of Engr	4,605	5,160	
Moraine Park Tech Inst	600	610	1,584
Beaver Dam	*	610	1,584
Mount Mary C	3,350	3,935	
Mount Senario C	3,520	3,700	
Nicolet C & Tech Inst	695	834	2,022
NE Wisconsin Tech Inst	*	585	2,337
Northland C	*	4,835	
Northwestern C	*	1,480	
Patricia Stevens Career C	3,990	4,290	
Ripon C	6,020	6,632	
St. Agnes Hosp Sch of Radiologic Tech	*	200	
St Mary's Med Center Sch of Radiologic Tech:			
Racine	*	1,150	
St Norbert C	4,495	4,835	
Silver Lake C	3,400	3,600	
SW Wisconsin Voc-Tech Inst	*	522	2,336
Stratton C	*	3,750	
Theda Clark Reg Med Ctr	*	400	
Viterbo C	3,780	4,074	
Waukesha County Tech Inst	*	530	2,337
Waukesha Mem Hosp Sch of Radiologic Tech	*	250	
Wisconsin C of Cosmetology	1,850	2,500	
Wisconsin Conservatory of Music	3,910	4,580	
Wisconsin Indianhead Voc-Tech & Adult Education District	*	610	2,310
Wisconsin Lutheran C	3,800	4,240	
WYOMING			
Casper C	380	380	900
Central Wyoming C	336	384	
E Wyoming C	330	330	200
Laramie County CC	401	413	522
Sheridan C	440	440	702
U of Wyoming	616	616	1,460
W Wyoming CC	347	347	51
Wyoming Tech Inst	3,990	3,990	
CANADA			
Champlain Regional C	*	50	3,150
McGill U	4,510	4,510	
AMERICAN SAMOA			
American Samoa CC	*	29	48
VIRGIN ISLANDS			
C of the Virgin Islands	*	547	960
PUERTO RICO			
American C	1,300	1,500	
Antillian C	1,882	1,882	
Caguas City C	*	2,524	
Caribbean University C	1,425	1,425	
Commercial Inst JC	*	1,575	
Conservatory of Music	210	210	
Electronic Data Processing C	1,382	1,455	
Inter American U Regional Colleges	1,390	1,425	
Intl Inst of the Americas of World U	*	1,980	
Metropolitan University C	*	1,250	
Puerto Rico JC	1,365	1,350	
Tech Commercial Inst JC	1,320	1,180	
Turabo U	*	1,554	

3 Foundations Give Arts Fund $9-Million

NEW YORK

Three foundations have contributed $9-million to a new fund intended to strengthen the "fragile economic base" of organizations in the arts.

The National Arts Stabilization Fund, which plans to begin operating here by the end of 1983, expects to raise $33-million in the next five years and make grants of more than $25-million to help bolster the budgets of arts institutions.

William M. Ellinghaus. president of the American Telephone and Telegraph Company, will be chairman of the fund's board of directors. The initial grants to establish the fund, announced last week, were $7-million from the Ford Foundation, $1.5-million from the Andrew W. Mellon Foundation, and $500,000 from the Rockefeller Foundation.

Planners of the new organization said it would use grants to provide incentives for arts organizations to stabilize their finances and sustain their artistic growth. Grants ranging from $150,000 to $1-million each are expected to be made to about 100 organizations including theater, dance, and opera groups; symphonies; art museums; and arts-training institutions during the five years.

Under one type of grant, the fund would pay off half the accumulated deficit of an arts group if the group raised additional funds to eliminate the other half of the deficit. The group would then be expected to complete each of the next four years without a deficit.

A second type of grant would create a reserve fund from which an arts organization could borrow to cover temporary shortages of cash. The borrower would have to end each fiscal year with the loans repaid and with assets that exceed liabilities.

The National Arts Stabilization Fund also plans to provide arts groups with the services of consultants in budgeting, financial planning, and marketing.

Franklin A. Thomas, president of the Ford Foundation, said that many arts groups have a "fragile economic base" and accept "financial crisis as a way of life." Most of them, he said, "are undercapitalized, have difficulty in securing credit, and are constantly stretched to raise funds to supplement earnings."

Officials of the Ford Foundation described the new fund's budget-stabilization approach as similar to a program through which the Ford Foundation has granted $30-million to 76 performing-arts groups since 1971.

California Budget *Continued from Page 1*

that the governor exceeded his authority when he reduced the allocations for the three systems rather than veto the entire higher-education budget.

The California State Student Association has threatened to challenge the cuts in court.

Leaders of California's community colleges predicted last week that if the $100 fee is not imposed, more than 100,000 of the system's 1.2 million students will either drop out or be turned away because of reduced class offerings.

After Mr. Deukmejian made his cuts, several community-college districts—including the one in Los Angeles, which faces a $26-million deficit in 1983-84—announced that they were canceling their summer sessions.

Officials of California's three systems of higher education expressed shock at the severity of the cuts.

"I didn't think he would try to balance the budget on the backs of those who can afford it least—community-college students," said Gerald C. Hayward, chancellor of the community-college system.

William B. Fretter, a vice-president of the University of California, said, "The quality of the university is now at risk, as is access to it for the students of the state." The university approved a $167 increase in its student fee—to $1,380 a year—after Mr. Deukmejian announced his cuts. Fees at the 19 campuses of the California State University system were raised by $182—to $687 a year.

Chancellor W. Ann Reynolds said that to absorb the cut the C.S.U. system would be forced to lay off librarians and custodians, reduce book purchases, defer maintenance, and freeze hiring.

In defending his actions, Governor Deukmejian denied that the fees would impose a hardship on students.

Two-year colleges in other states, he said, charge fees for enrollment.

"There's no way that a person can't raise $50 a semester if they're willing," he said. Students "who really want to get an education" can get jobs to help defray the costs, he added.

The budgets approved by the legislature and cut by Mr. Deukmejian do not cover pay raises for faculty members at the University of California and the California State University systems. Those are being negotiated separately as part of a compensation package for all state employees.

All of the Series 1983 Bonds having been sold, this announcement appears as a matter of record only.

In the opinion of Bond Counsel, under existing statutes, court decisions, regulations and published rulings, interest on the Series 1983 Bonds is exempt from all present federal income taxes and from all present California personal income taxes.

NEW ISSUE

$10,500,000

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July 26, 1983

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'In' Box

What's the best way to make sure that campus use of copyrighted works falls within legal bounds? Librarians and publishers continue to wrangle over the answer to that question, several months after an out-of-court settlement was reached in a publishers' suit against New York University that was expected to clear up some of the confusion.

In a recent letter to more than 5,000 college and university administrators, Townsend Hoopes, president of the Association of American Publishers, said his group would "actively" encourage campuses to adopt formal policies to limit faculty use of protected works. He said campus officials should consider adopting N.Y.U.'s policy.

But some librarians have objected. Shirley Echelman, executive director of the Association of Research Libraries, pointedly told library directors in a letter of her own that the guidelines agreed to by N.Y.U. were "neither required by law nor ideally suited to higher education."

For example, she said, requirements that a copied work must not exceed 1,000 words are "too stringent for college-level courses." Instead, Ms. Echelman endorsed a "model policy" developed by the American Library Association.

▪

Two briefing papers on photocopying and copyright—one specifically for faculty members and administrators and the other aimed at librarians and archivists—can be obtained from the A.R.L., 1527 New Hampshire Avenue, N.W., Washington 20036. Requests should include a self-addressed, stamped envelope.

Samples of photocopying policies are available from the Association of American Publishers, 2005 Massachusetts Avenue, N.W., Washington 20036, and from the American Library Association, 50 East Huron Street, Chicago 60611.

▪

College administrators who acknowledge that they have mentors are not more successful than those who do not, a recent study found.

Almost 54 per cent of 258 administrators at Rhode Island colleges and universities who were surveyed in 1982 said they had mentors. But they did not report significantly higher salaries or greater satisfaction with their career progress than the others.

The study was conducted for her doctoral dissertation by Ann Marie Dickson, coordinator of the general-education program at the New England Institute of Technology.

Ms. Dickson says the results may be of particular interest to women, who are often advised that having a mentor—someone more established to guide their careers—is necessary for professional advancement.

The study also turned up a salary gap between male and female administrators—even though those groups were similar in age, length of service, level of education, and distribution in job categories. About one-fourth of the administrators were women. Their average salary was $25,858, compared with $32,163 for the men.

Personal & Professional

Size of Faculty Is Up at 30 Pct. of Colleges, Holds Steady at 55 Pct., Survey Finds

By BEVERLY T. WATKINS

After several years of cutbacks in their work force, a number of colleges and universities appear to be rebuilding their staffs.

A survey conducted for *The Chronicle* has found that about 30 per cent of the participating colleges and universities increased the number of faculty positions during academic 1982-83, while at about 18 per cent the number of administrative positions grew.

About 15 per cent of the institutions said they had reduced the number of administrative and faculty positions during the year, largely by cutting the number of people filling those jobs and increasing the work load of those who remained. Colleges also reduced the scope of some programs and combined the responsibilities of several jobs into one. Many institutions encouraged early retirement.

'No Dramatic Changes'

A majority of campuses, however, reported that the size of their total work force had neither increased nor decreased last year. About 55 per cent of the colleges and universities said the number of faculty positions had remained the same, while more than 65 per cent reported that the number of administrative positions was unchanged. A sizable majority—between 60 and 80 per cent—indicated that the number of professional and clerical staff members and campus maintenance and service personnel also had not changed during 1982-83.

David E. Reilly, president of the Academy for Academic Personnel Administrators, said he thought many campuses were now going through a period of "readjustments and restructuring," with no dramatic changes in the size of the work force.

Mr. Reilly said that at the University of Bridgeport, where he is associate vice-president for personnel administration, "we've had the same number of full-time faculty members—about 250—for the last three or four years, but we have made changes in the mix. We have moved person A to department B."

He added, "We're hiring a dozen or so faculty members this year, but more as replacements for people on leave, or retired, or whatever. We are not hiring any more administrators."

Details of *The Chronicle*'s survey of personnel practices on college campuses appear on the following page.

Irving J. Spitzberg, Jr., general secretary of the American Association of University Professors, agreed in general with Mr. Reilly.

"My gut feeling," he said, "is that most campuses are holding their own. They are stable, and they view that as an accomplishment. Their strategy now is to hold as many positions open as possible so they have the flexibility to deal with uncertainty."

He said he thought more campuses might be "reallocating" rather than adding faculty positions. "Everything is yielding to engineering, management, and computer science today," he said.

Mr. Spitzberg pointed out that an increase in the number of administrative and faculty positions might not mean that the actual number of administrators and faculty members has increased.

For example, he said, "a public institution may be given some additional faculty lines in the budget, but the savings required of the institution could be such that it couldn't fill the positions."

New Positions in Universities

The survey, which was conducted for *The Chronicle* by John Minter Associates, was based on a stratified random sample of 200 public and private colleges and universities. Information was provided by chief academic, business, and personnel officers at the institutions.

Close to 45 per cent of private research universities and about 30 per cent of public research universities reported that the number of faculty positions had increased in the past academic year.

About one-quarter of the private universities also reported an increase in administrative positions.

In the Northeast and Mid-Atlantic states and in the Mountain and Western states, roughly 35 per cent of the colleges and universities reported an increase in the number of faculty positions, while about one-quarter said the number of administrative positions had increased.

Now Older Employees Have Health-Care Choice

By SUZANNE PERRY

As a result of Congressional efforts to reduce Medicare costs, college and university employees who are 65 to 69 years old can now choose to have their institution provide their primary health-care coverage.

According to regulations published recently by the Equal Employment Opportunity Commission, employers must offer employees in the 65-to-69 age group the same health coverage they offer younger workers. The older employees must decide by early September whether that plan or Medicare will be their primary health plan.

In making the decision, academic personnel specialists and federal officials suggest that college and university employees consider these factors:

► The comprehensiveness of their college health plan. For the sake of comparison, Part A of Medicare, which covers hospital costs, has a $304 deductible for each "benefit period." Part B, which is optional, covers 80 per cent of the cost of physicians' services.

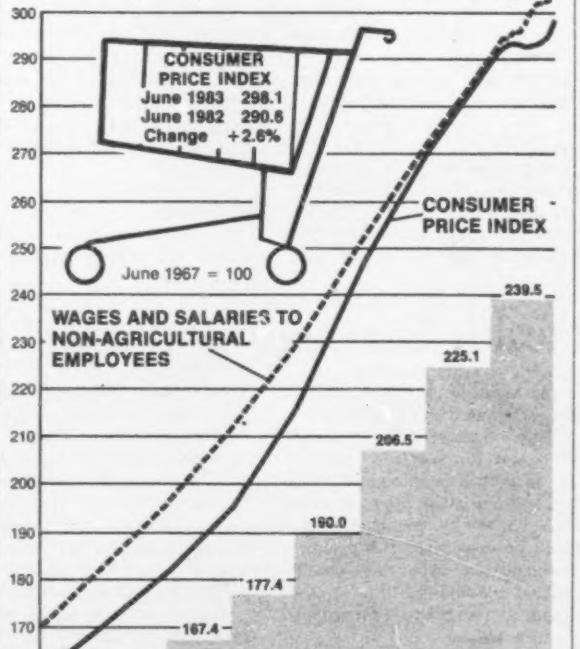
► Premium costs. Medicare participants pay nothing for Part A coverage, but $12.20 per month for Part B coverage. Many colleges pay most or all of the premiums for their own plans.

► Future Medicare participation. Employees who elect their employer's health plan, and do not pay the Part B Medicare premium, will be penalized financially when they switch to the federal plan at age 70. A 10-per-cent surcharge is added to the premium for each year that an eligible employee does not enroll in Medicare.

To avoid that penalty, some employees may choose to continue

Continued on Following Page

Faculty Pay and the Cost of Living



SOURCES: DEPARTMENT OF LABOR, DEPARTMENT OF COMMERCE, AND AMERICAN ASSOCIATION OF UNIVERSITY PROFESSORS

CHRONICLE SURVEY

Changes in Size of Colleges' Work Force in the Past Year

	PUBLIC INSTITUTIONS				PRIVATE INSTITUTIONS				REGIONS				
	Research Universities	Comprehensive Colleges*	2-Year Colleges	All	Research Universities	Comprehensive Colleges*	Liberal Arts Colleges	All	East	Midwest	South	West	All Institutions
Number of faculty positions has:													
Increased	31.8%	22.6%	34.4%	31.1%	43.5%	20.7%	27.6%	26.8%	37.3%	22.6%	23.6%	33.5%	29.5%
Decreased	13.6%	16.1%	15.6%	15.6%	4.3%	27.6%	7.9%	13.1%	11.5%	19.9%	9.9%	24.5%	14.6%
Stayed the same	54.5%	61.3%	50.0%	53.3%	52.2%	51.7%	64.5%	60.1%	51.2%	57.6%	66.5%	42.1%	55.9%
Number of administrative positions has:													
Increased	9.1%	6.5%	15.6%	12.7%	25.0%	27.6%	26.3%	26.6%	26.7%	17.7%	13.8%	22.7%	18.1%
Decreased	22.7%	32.3%	12.5%	18.4%	4.2%	6.9%	13.2%	10.6%	11.9%	12.5%	18.2%	21.4%	15.5%
Stayed the same	68.2%	61.3%	71.9%	68.8%	70.8%	65.5%	60.5%	62.7%	61.4%	69.8%	68.1%	55.9%	66.5%
Number of professional-staff positions has:													
Increased	9.5%	9.1%	10.5%	10.0%	28.6%	6.3%	20.8%	18.2%	24.7%	9.3%	10.5%	13.3%	13.2%
Decreased	23.8%	18.2%	5.3%	11.2%	23.8%	0.0%	0.0%	2.3%	7.6%	14.8%	4.3%	10.2%	7.7%
Stayed the same	66.7%	72.7%	84.2%	78.8%	47.6%	93.8%	79.2%	79.5%	67.6%	75.9%	85.2%	76.5%	79.1%
Number of clerical-staff positions has:													
Increased	14.3%	12.9%	18.8%	16.9%	25.0%	27.6%	31.6%	30.0%	31.8%	15.1%	18.8%	24.3%	22.0%
Decreased	42.9%	25.8%	18.8%	22.5%	25.0%	13.8%	9.2%	11.6%	15.8%	22.7%	10.0%	29.9%	18.3%
Stayed the same	42.9%	61.3%	62.5%	60.6%	50.0%	58.6%	59.2%	58.4%	52.4%	62.1%	71.2%	45.8%	59.7%
Number of trade-and-technical positions has:													
Increased	4.8%	3.2%	3.8%	3.8%	13.6%	4.3%	11.7%	9.8%	15.3%	1.7%	0.0%	12.4%	6.0%
Decreased	33.3%	12.9%	11.5%	14.0%	22.7%	4.3%	6.7%	7.4%	16.9%	18.7%	9.5%	14.0%	11.6%
Stayed the same	61.9%	83.9%	84.6%	82.3%	63.6%	91.3%	81.7%	82.8%	67.8%	79.6%	90.5%	73.6%	82.4%
Number of auxiliary positions has:													
Increased	14.3%	10.7%	9.1%	10.1%	26.6%	14.8%	5.8%	10.0%	9.7%	9.7%	5.4%	14.1%	10.1%
Decreased	9.5%	3.6%	13.6%	10.2%	9.5%	18.5%	7.2%	10.6%	4.1%	12.3%	8.9%	7.4%	10.3%
Stayed the same	76.2%	85.7%	77.3%	79.7%	61.9%	66.7%	87.0%	79.5%	86.2%	78.1%	85.7%	78.5%	79.6%
Number of contract-labor positions has:													
Increased	7.7%	0.0%	27.8%	19.6%	27.8%	26.7%	13.0%	17.2%	21.3%	10.4%	15.5%	9.0%	18.5%
Decreased	7.7%	0.0%	5.6%	4.5%	5.6%	0.0%	0.0%	0.5%	0.0%	1.1%	2.6%	0.0%	2.7%
Stayed the same	84.6%	100%	66.7%	75.9%	66.7%	73.3%	87.0%	82.4%	78.7%	88.5%	81.9%	91.0%	78.7%

* Institutions with more than 1,500 students, a liberal-arts program, and at least one professional program.

Note: Survey data are based on responses from a stratified random sample of 100 public and 100 private colleges and universities. Private two-year colleges and institutions with enrollments under 500 are not included. Technical inquiries about the survey design and sampling techniques should be addressed to John Minter Associates, P.O. Box 107, Boulder, Colo. 80306.

SOURCE: SURVEY FOR THE CHRONICLE BY JOHN MINTER ASSOCIATES

NOTES ON COMPUTERS

U. of Michigan to Charge Students a User Fee

Providing computers for all the students who need them is a problem faced by many colleges and universities. Some solve it by requiring students to buy their own.

That solution has not been adopted at the University of Michigan's College of Engineering, where students this fall will begin using systems that cost between $4,000 and $5,000 and are capable of advanced graphics and complicated networking.

Instead of settling for more affordable but limited computers, the college plans to purchase some 500 advanced computers and tack a $100-per-term user fee onto the tuition charged each of its 6,000 undergraduate and graduate students. This fee, which will repay the purchase price of the equipment in about two years, will allow students unlimited access to the new computers clustered in classrooms and laboratories.

The computers will be connected with networks within the engineering college and also to U.M. Net, the university-wide computer network, so that they can communicate with other computers on the campus.

Richard L. Phillips, a professor of engineering, said 200 computers would be in place when the semester begins in September. At least 200 more will be purchased by the end of the year. College officials have not yet settled on a manufacturer.

•

"Garage developers"—freelance computer programmers who want to market their creations—can get some insights into the software publishing market, meet software publishers, and maybe win $10,000 at "The Great American Software Contest," November 1-3 in Boston.

The contest is actually a conference where participants can learn what publishers look for, the role of agents, and how to find the right venture capitalists. The conference is sponsored by TALMIS, a microcomputer research and consulting company.

Software publishers will attend to see new microcomputer programs, talk to the developers, and discuss prospects for the software market, said Jeanne Dietsch, president of TALMIS. She expects more than 300 publishers and 1,000 software developers to attend. Participants are allowed to enter one piece of software in the contest for the registration fee of $195; they must provide microcomputers on which to run their programs.

A total of 21 prizes worth $30,000 will be awarded to software developers. Categories will include business, game, and educational programs. For registration information, contact MasterPlans Conference Management, 111 East Chestnut Street, Suite 24F, Chicago 60611; (312) 944-1711.

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Software demonstrations will be the drawing card at the "Electronic Workshop," a feature of the Modern Language Association's annual convention in New York on December 28 and 29. The workshop will allow scholars to demonstrate their educational software. Sales will not be allowed; the purpose is to exchange information.

Demonstrators must pay $50 for telephone lines, special electrical outlets, and security. Providing the necessary hardware is the responsibility of the demonstrator.

For more information contact Ann Hull, director of convention programs, Modern Language Association, 62 Fifth Avenue, New York 10011; (212) 741-5588.

—JUDITH AXLER TURNER

Health-Coverage Choice for Older Workers

Continued from Preceding Page

paying Medicare premiums even if they remain in their college plan.

"This will be one of the most difficult things for people to decide," says Jack N. Ray, director of insurance and retirement programs at Indiana University. While Medicare would be considered a supplementary health plan under those circumstances, it would not in most cases provide employees with many benefits, he explains.

At DePaul University, the personnel office is recommending combined participation in the university health plan and Medicare as the "safest route." In addition to the penalty problem, employees face another risk if they do not participate in Medicare, explains Joyce A. Fecske, DePaul's director of personnel.

Medicare has an "open enrollment" period early each year, but the benefits are not effective until the following July, she says. Therefore, employees who reach age 70 and are removed from their employer's plan at an awkward time of year could find a gap in their health coverage.

The E.E.O.C. regulations interpret provisions of the 1982 Tax Equity and Fiscal Responsibility Act that are aimed at shifting health-care costs for employees under the mandatory retirement age of 70 away from the federal government.

Until now, some colleges have offered employees in the 65-to-69 age group supplemental health plans for expenses not covered by Medicare. Those plans are no longer legal, since older employees must be offered options that are identical to those offered other employees.

Because the supplemental plans were relatively inexpensive, the result of the new law is that many older employees will be paying higher health premiums, particularly if they combine Medicare and employer coverage.

Ms. Fecske, who is chairman of the fringe benefits and services council of the College and University Personnel Association, predicts that, in the long run, the law will mean higher costs for colleges and universities and for their employees of all ages. Because older people have higher medical bills than younger workers, their increased participation in college health plans is bound to increase premium costs, she explains.

The E.E.O.C. regulations were published in the June 7 issue of the *Federal Register*. Written comments are being accepted—in quadruplicate—until August 8 by Treva McCall, Executive Secretariat, E.E.O.C., Room 5215, 2401 E Street, Washington 20506.

A pamphlet explaining the new law to employees, *Employed Medicare Beneficiaries Age 65 Through 69*, is available at Social Security Administration offices across the country.

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News Summary

Articles on inside pages

Universities need to become "partners and advocates" of the public schools, according to a statement by the presidents of six major universities. Story on Page 5.

Substantial changes are needed in the teaching profession, according to a new report from the Carnegie Foundation for the Advancement of Teaching. Story on Page 6.

Servants in France and women in prison are among the subjects tackled by scholars in new books coming out this fall. Story on Page 7.

This week is the twenty-fifth anniversary of the National Defense Education Act of 1958, the first major federal program of aid for college students. See story on Page 11.

A coalition of federal legislators and civil-rights groups has urged the Supreme Court to reject the narrow interpretation of Title IX advocated by the Administration in the Grove City College case. Story on Page 11.

The Education Department has now given colleges until October 1 to comply with a new federal law linking draft registration with eligibility for student aid. Story on Page 13.

Edward Wynot, a professor at Florida State University, is the central character in an unusual case that some characterize as a grading scandal involving the school's varsity athletes and others as an administrative bungle. Story on Page 20.

South Africa's University of Cape Town is the scene of a furious debate over whether government ministers should speak on the campus. Story on Page 25.

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Student Aid Based on Merit Eyed by U.S.

By JANET HOOK

WASHINGTON

The Department of Education, responding to a growing public demand for higher standards in American education, is considering ways to provide more scholarships for academically talented students.

Many student-aid officials on college and university campuses are afraid an increased use of merit scholarships may cause a drain on support for needy students, but Education Department officials say they are looking for ways to avoid that.

"The Administration is not interested in a trade-off of dollars between need-based aid and merit aid," said Gary L. Jones, Under Secretary of Education, in a recent interview. "On the other hand, we are concerned about the middle-class family that has worked for 17 years on the development of their child's mind" and then finds

Continued on Page 13, Column 1

Presidents Move to Strengthen Their Control of College Sports

Tentative plan would allow them to modify NCAA rules

By N. SCOTT VANCE

KEYSTONE, COLO.

In a bid to curb abuses in college sports, a panel of university presidents meeting here last week tentatively endorsed a plan to give themselves and their colleagues effective control over the activities of the National Collegiate Athletic Association.

The American Council on Education's Committee on Division I Athletics endorsed establishing a "board of presidents" that would have the authority to veto or modify N.C.A.A. regulations and to impose new rules of its own design on association members. The A.C.E. panel is made up of 28 presidents from Division I institutions.

The proposed board would have 36 members—all chief executive officers of N.C.A.A. insitutions—who would be elected to three-year terms by association members. The board's actions could be overruled by a majority of the presidents of N.C.A.A. institutions voting by mail, or by two-thirds of the presidents if the board were to attempt to alter the association's constitution. The N.C.A.A. council, the association's governing board, would determine which of the presidents' actions would be submitted to the membership for approval.

If the A.C.E. panel gives final approval to the proposal at its next meeting on October 7, the measure will be put to a vote at the N.C.A.A.'s annual convention in January, where it will certainly be one of the most controversial items facing the delegates.

The president of the N.C.A.A., John L. Toner, who is athletic director at the University of Connecticut, last week assailed the proposal as "disruptive to the established N.C.A.A. democratic process." He predicted that it would be defeated if brought to a vote in January.

N.C.A.A. officials said they would not comment further until they have had a chance to examine the proposal and to meet with representatives of the A.C.E. group.

Education 'Subordinated'

In a draft of its proposal, the panel said the new board was necessary because athletic directors and coaches had assumed great control over college sports, both on the campuses and in the hierarchy of the N.C.A.A.

"As a result," the proposal said, "educational interests are often subordinated to the aims of winning games, boosting attendance, and maximizing television revenue. The consequences for academic standards and for the education of athletes are too well known to warrant repetition."

Derek C. Bok, president of Harvard University and chairman of the panel, said the group was not attempting to assess blame for the abuses that have occurred in college sports. To do so, he said, would be pointless. "One could argue that the presidents have been negligent in not taking enough responsibility," he said.

"Our chief concern," he added, "is to find a way to effectively express the views and interests of university presidents, not

Continued on Page 23, Column 1

HOT-WEATHER FOOTBALL

JIM ARGO, DAILY OKLAHOMAN

A fan blowing air over blocks of ice keeps 2 West Virginia U. players cool during an early-season football game last fall. An article on the dangers of football practice in hot weather begins on Page 19.

Sex Bias and the University

A sweeping consent decree at the University of Minnesota demonstrates in dramatic fashion the reach of efforts to improve the status of women in academe.

See "Personal & Professional," beginning on Page 15.

Pension Benefits Changed by 'Unisex' Tables

Women Gain Up to 8 Pct., TIAA Says; Men's Preferred Plans Unaffected

	Pct. Choosing in Past 3 Years		TIAA					
			Without Dividends		With Dividends		CREF	
	Men	Women	Women's Gain	Men's Loss	Women's Gain	Men's Loss	Women's Gain	Men's Loss
SINGLE-LIFE ANNUITIES								
No guaranteed period All payments end at death of annuitant	12%	33%	8%	8%	4½%	4½%	8%	8%
10-year guaranteed period Lifetime income to annuitant, with payments continuing to beneficiary during first 10 years if annuitant dies in that period	10%	24%	6½%	6½%	2½%	2½%	6%	6%
20-year guaranteed period Lifetime income to annuitant with payments continuing to beneficiary during first 20 years if annuitant dies in that period	9%	21%	3%	3%	1%	1%	2½%	2½%
JOINT-LIFE (SURVIVOR) ANNUITIES								
Full benefit to survivor Full payments as long as annuitant or spouse is living, with payments continuing to beneficiary during specified period of 10 or 20 years if both husband and wife die in that period	37%	15%	0%	0%	0%	0%	0%	0%
Two-thirds benefit to survivor At death of annuitant or spouse, payments reduced to two-thirds for rest of survivor's life; payments continue to beneficiary during specified period of 10 or 20 years if spouse dies in that period	25%	4%	0%	0%	0%	0%	0%	0%
Half benefit to spouse Full lifetime income to annuitant, with payments reduced to one-half at annuitant's death and continuing to spouse for life; no reduction in payments if spouse dies first; half benefits continue to beneficiary during specified period of 10 or 20 years if both annuitant and spouse die in that period	7%	3%	3½%	3½%	2%	2%	3½%	3½%

SOURCE: T.I.A.A. AND C.R.E.F.

The two income arrangements most often chosen by male participants in the Teachers Insurance and Annuity Association and the College Retirement Equities Fund will be unaffected by "unisex" mortality tables that were put into effect August 1 to comply with a recent decision by the Supreme Court.

The two options, among the plans known as joint-life annuities, were selected by a total of 62 per cent of male retirees in the past three calendar years, the companies said.

The two options provide lifetime benefits to an annuitant and his or her spouse, with full or reduced benefits paid to one or more secondary beneficiaries during a "guaranteed period" of 10 or 20 years if both annuitant and spouse die in that period.

For the most popular options among female participants, however, the use of unisex tables are expected to increase benefits stemming from new premium payments by up to 8 per cent. Those options, among those known as single-life annuities, were selected by 57 per cent of female retirees in the past three years.

Benefits paid under those choices continue for life or, if the annuitant dies before the end of an optional 10-year guaranteed period, the payments continue to a beneficiary for the remainder of that time.

The table above shows, in percentages, approximately how much the male and female participants in T.I.A.A. and C.R.E.F. can expect new premium payments to increase or reduce their future benefits under unisex calculations, compared with benefits calculated separately for men and women.

For all income options listed, the changes represent increases for women and comparable decreases for men. The figures for joint-life annuities are based on an assumption that both the husband and wife are 65 years old. Dividends for T.I.A.A. are based on a 1983 scale that may change in future years, the companies said.

The companies also noted that all annuity benefits resulting from premiums applied before August 1 would continue to be determined on a "sex-distinct" basis. Such distinctions, resulting in lower benefits to women, have been based on statistics showing that women, on the average, live longer than men.

Settlement Reached in Pension Suit

Continued from Page 15

period of about a year. Last spring, for the first time, the companies also began giving all participants in their pension plans an annual record of when premium payments for the previous calendar year had been submitted on their behalf.

Mr. Slater said there was no link between the New Jersey case and the new accounting to participants. He also said the "vast majority" of institutions that had been notified of late payments had made their employees' accounts "whole."

But he said he did not know how many other T.I.A.A.-C.R.E.F. participants might still be owed interest because of late payments, particularly if those payments went back more than six or seven years.

He said participants who wanted reviews of their accounts to determine whether they included any late payments could call the companies at (212) 490-9000, or write to them at 730 Third Avenue, New York 10017.

In the New Jersey case, William J. Bigham, a lawyer for the A.A.U.P., said some premiums had been remitted up to three months past the pension companies' 31-day grace period. The suit blamed negligence by state and university officials for the delay.

Under the settlement, approved by Superior Court Judge William A. Drier, neither the universities nor the state admitted any wrongdoing.

Plaintiffs to Receive $190,000

According to Mr. Bigham, the settlement will provide the 3,000 or so plaintiffs with about $190,000—the sum expected to be left after the payment of legal expenses. The agreement calls for the pension division and the University of Medicine and Dentistry to pay a combined total of $220,000, and for Rutgers to pay $20,000.

Payments or credits to individual plaintiffs will range from $10 to about $500, Mr. Bigham said. Those already retired will receive cash payments, he said, with the others receiving credit in their pension accounts.

Personnel at T.I.A.A. and C.R.E.F. are working with the teachers' representatives to try to determine specifically which employees of the universities are entitled to settlement funds and how much they should receive.

In court papers, the state pension division said it had not been aware of the T.I.A.A.-C.R.E.F. grace period until April, 1982, and it claimed that the companies had not met an "obligation" to notify it of their premium due dates and policy on payments.

The companies, which administer retirement programs for employees at about 1,500 colleges and universities throughout the country, denied any responsibility for late premium payments but agreed to provide the necessary clerical work under terms of the settlement.

Mark Feldman, associate general counsel at T.I.A.A. and C.R.E.F., said the companies had gone along with the settlement because contesting it was potentially expensive. He added that the companies already had put together most of the information the plaintiffs were seeking anyhow, so "it was worth it to us" to accept the settlement. —ROBERT L. JACOBSON

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Events in Academe—a Special Pull-Out Section: Pages 31-58

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News Summary

Articles on inside pages

Shark repellent and social-science institutes were among the topics on the agenda at scholarly meetings last week. Story on Page 5.

Fellowships and grants have been awarded by the American Council of Learned Societies to 248 scholars in the humanities. List on Page 8.

The accrediting agency for journalism programs in the U.S. is embroiled in a serious dispute with two universities. Story on Page 15.

Congress returns from a five-week recess next week to take up pressing business on appropriations, including a measure setting spending levels for the Department of Education. Story on Page 17.

Recommendation letters too seldom tell admissions committees or employers what they need to know about a candidate. Story on Page 21.

Universities in the Atlantic provinces may withdraw from Canada's intercollegiate football championship. Story on Page 25.

Colleges may refuse to admit as many as 10,000 Nigerian students this fall if they are unable to pay their bills. Story on Page 27.

Visiting Americans failed to secure the release from prison of a top administrator of El Salvador's National University. Story on Page 29.

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'HOTTEST ISSUE OF THE DAY'

Universities Moving to Raise Quality of Education Schools

By BEVERLY T. WATKINS

Stung by recent criticism of the way they train schoolteachers, many colleges and universities are trying to improve both the quality of their education schools' curricula and the caliber of students they enroll.

Criticism of teacher education has increased substantially since the National Commission on Excellence in Education and several other groups issued reports last spring decrying the condition of public education. The reports recommended reforms in the way schoolteachers are prepared.

"Teacher education is the hottest issue of the day in the United States. It has put us in a quandary about where to go next," says Margaret Marston, a member of the Virginia State Board of Education who served on the National Commission.

"There are many reasons for the poor quality of our teachers," she acknowledges. "They come from groups with the lowest S.A.T. scores. Salaries are dismally low. Good teachers leave the schools after several years for more pay or better jobs or because they have no authority in the classroom or because they get weary."

While "we don't know exactly what to do," says Ms. Marston, "we might demand more rigor from the teachers' colleges."

85 Pct. Have Made Changes

Many of the 1,300 higher-education institutions with teacher-education programs have already made some changes. A survey conducted last year by the National Center for Education Statistics indicated that, during the last five years, 85 per cent of the schools of education had taken some step to improve their offerings. About 75 per cent had tightened their entrance requirements.

A few institutions have undertaken substantial reforms. Oregon State University and Western Oregon State College merged their schools of education last fall to eliminate duplicate programs and improve the overall quality of their offerings. The University of California at Berkeley, the University of Michigan, and other institutions are currently revamping their entire programs after a series of cuts and administrative changes. A few institutions, including

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States Play 'Catch Up' with College Funds

By JACK MAGARRELL

The shifting winds of state finance have caused some sharp changes of course in appropriations for higher education this year.

In states where public support for higher education went down last year, double-digit increases are reported this year. Minnesota, for example, which was down more than 4 per cent last year, is up 18 per cent this year.

And in all but one of the states where higher-education appropriations are down this year, they were up substantially last year. Oklahoma's appropriations, for example, increased 23 per cent last year but are down 3 per cent this year.

Only South Dakota, among 35 states reporting, suffered reductions in appropri-

Continued on Page 12, Column 1

U.S. and Soviets to Resume Talks on Exchanges

Programs were curtailed over Afghanistan, Poland

By MALCOLM G. SCULLY

WASHINGTON

The United States and the Soviet Union have agreed to resume negotiations on a new agreement for cultural, scientific, and scholarly exchanges.

Such exchanges have been cut back in recent years because of the deteriorating political relations between the two countries. In curtailing the programs, both the Carter and the Reagan Administrations have cited U.S. displeasure over the Soviet military intervention in Afghanistan in late 1979; the arrest of Andrei D. Sakharov, the dissident physicist, in 1980; and Soviet support for the Polish government's declaration of martial law in 1981.

Whether the new agreement will be affected by U.S. anger over the loss of a Korean airliner last week was unclear.

The decision to reopen negotiations reflects the view of some scientists and State Department officials that the suspension of exchanges has failed to influence Soviet behavior and has created more problems than advantages for the United States.

"People have decided that there is some very real usefulness in having some agreements," said one State Department official. Even so, the official and others familiar with the decision said any major expansion of scientific and scholarly cooperation would be contingent on an overall improvement in relations.

According to an official statement from

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South Africa Backs Away from Quota Plan for Blacks

BY HELEN ZILLE

CAPE TOWN

The South African government has retreated—at least temporarily—from its plans to put into effect a law setting quotas for the number of black students at white universities.

The decision was announced last week by Gerrit Viljoen, Minister of National Education, who is empowered to set a quota limiting the number of African students at each of the country's eight white universities, at the one for students of mixed race, and at the one for Indians.

Mr. Viljoen was granted the authority to set quotas under legislation that was passed by South Africa's Parliament in July. The move drew the strongest opposition from white English-language universities since segregation was imposed on them by the Nationalist government 24 years ago.

In his announcement, Mr. Viljoen made it clear that the quota law would remain on the statute books and that he could impose it at any time if he considered it necessary.

Nor does the latest development mean that universities will be entirely free to admit students on the basis of merit alone.

The old system, under which black students needed a permit to attend white universities, will remain in force in some disciplines—medicine, dentistry, veterinary science, nursing, pharmacy, optometry, agriculture, and land surveying.

In all other fields, the universities will be

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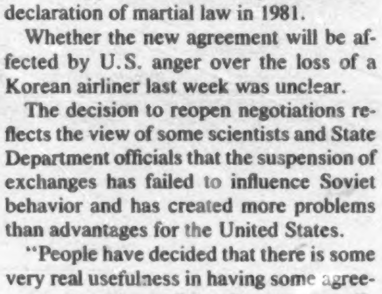
Behavioral Science vs. Animal Rights



Animal-protection groups have marked behaviorial research for particular scrutiny next year. Scientists at the annual meeting of the American Psychological Association were advised to "insure that their own message is clearly heard."

For details, see the "Scholarship" section, beginning on Page 5.

1983-84 Funds for Colleges and Universities Up 6 Per Cent in First 35 States to Report

States are increasing their support for higher education by an average of about 6 per cent this year, judging from appropriations reported by 35 states.

That growth is somewhat larger than last year's 5 per cent, the smallest increase in more than 20 years.

Total spending for higher education is expected to reach $89-billion this year, exceeding last year's figure by more than 11 per cent, according to estimates released last week by U.S. Education Secretary Terrel H. Bell.

Public colleges and universities are expected to spend $59-billion in 1983-84, a 10.9-per-cent increase. Spending by private institutions is estimated at $30-billion, a 13.2-per-cent increase.

The Education Department's estimates include revenue from student fees, the federal government, and private sources, as well as state appropriations.

Taxes Up, Despite Recession

The states continue to suffer the effects of the national recession, but more and more of them are reaching a point where further budget cuts seem less acceptable than tax increases.

Early estimates indicate that the dollar increases in state taxes this year will be more than double the yearly increases of the past two years.

State taxes were raised by roughly $4-billion in fiscal 1982 and again in fiscal 1983, according to the Tax Foundation, a nonprofit research organization in Washington.

Earlier attempts by states to patch up budgets by reducing spending and by increasing special levies—such as the "sin taxes" on cigarettes and liquor—have been replaced by increases in such broad-based taxes as those on income and sales, said Robert W. Schleck, a researcher at the Tax Foundation.

Raising the broad-based taxes, he said, indicates that the states are "seriously concerned with raising money" for general purposes.

The 35-state figures for higher-education appropriations for 1983-84 were compiled by M. M. Chambers, professor of education administration at Illinois State University.

The total amount appropriated for higher education in 35 states for 1983-84 is 6 per cent larger than the total for the same states last year, Mr. Chambers reported.

Data compiled by Mr. Chambers show that state support for higher education in all 50 states in 1982-83 totaled more than $24-billion, an increase of 5 per cent, compared with an average increase of 13.7 per cent a year in the previous 20 years.

While the growth of state support for colleges and universities has slowed in the past two years, so has the rate of inflation, which had undercut the purchasing power of larger increases in previous years. The inflation rate as measured by the Consumer Price Index for the year ending June 30 was only 2.6 per cent, compared with 9.6 per cent two years earlier.

Tuition rates have been increased substantially at many public institutions to augment state appropriations that were considered inadequate.

Moving Up on State Agendas

Education, often linked to plans to bolster economic development, has moved higher on the agendas of state officials at their regional and national meetings in the past year.

At the summer meeting of the National Governors' Association in Portland, Me., the governors called for state action to strengthen education at all levels.

Legislators from 14 states in the South, at a conference in Asheville, N.C., sponsored by the Southern Regional Education Board, endorsed recommendations for improving educational quality.

The recommendations included raising high-school graduation requirements and college admissions standards, upgrading teacher-education programs, strengthening the teaching of mathematics and science in the schools, and reappraising the goals of vocational education.

"States must play the key role in improving the quality of education," said a resolution adopted by the Southern legislators. "This will require a new level of cooperative efforts by governors, legislators, and boards of education and higher education."

—JACK MAGARRELL

Higher-Education Appropriations for 1983-84 in 35 States

	Appropriation for 1983-84	1-year change	2-year change
Alabama	$ 410,038,000	+ 1%	+ 9%
Arizona	336,080,000	+15%	+10%
Arkansas	197,321,000	0%	+ 7%
Colorado	366,747,000	+ 5%	+20%
Connecticut	273,706,000	+ 8%	+19%
Delaware	77,792,000	+ 1%	+ 8%
Georgia	570,170,000	+ 7%	+14%
Hawaii	181,560,000	− 2%	+17%
Idaho	101,107,000	+ 8%	+ 6%
Indiana	503,484,000	+16%	+ 4%
Iowa	372,128,000	+ 1%	+16%
Kansas	306,473,000	0%	+10%
Kentucky	400,529,000	+ 9%	+18%
Maryland	437,028,000	+ 1%	+13%
Michigan	887,471,000	+ 3%	+ 5%
Minnesota	612,209,000	+18%	+12%
Mississippi	345,370,000	+17%	+15%
Missouri	363,689,000	+ 2%	+12%
Montana	103,617,000	+ 9%	+24%
Nebraska	193,925,000	+ 2%	+ 7%
Nevada	75,360,000	+ 5%	+14%
New Mexico	187,600,000	+ 2%	+ 9%
New York	2,166,908,000	+ 8%	+17%
North Dakota	108,725,000	0%	0%
Ohio	883,761,000	+ 4%	+20%
Oklahoma	389,167,000	− 3%	+20%
Oregon	272,969,000	+13%	+ 8%
Rhode Island	97,651,000	+ 7%	+17%
South Carolina	392,471,000	+ 9%	+ 9%
South Dakota	53,070,000	− 1%	− 7%
Utah	198,060,000	+ 1%	+14%
Vermont	40,343,000	+ 7%	+19%
Virginia	617,283,000	+ 5%	+13%
Washington	566,477,000	+14%	+14%
West Virginia	199,319,000	+ 3%	+ 4%
Total for 35 states.	$13,289,608,000	+ 6%	+13%

SOURCE: M. M. CHAMBERS, ILLINOIS STATE UNIVERSITY

Note: Amounts are state tax funds appropriated for annual operating expenses, scholarship programs, and statewide governing or coordinating boards. Not included are appropriations for capital outlay or money from sources other than state taxes.

States Play 'Catch Up' with Funds for Colleges and Universities

Continued from Page 1

ations in both of the past two years.

Data for 35 states have been reported so far in the annual compilation of higher-education appropriations by M. M. Chambers, professor of education administration at Illinois State University.

Other states reporting decreases in appropriations for fiscal 1984 are Hawaii, down 2 per cent after an increase of nearly 20 per cent last year; Kansas, down 0.5 per cent following last year's increase of 10.5 per cent; and Arkansas, down 0.4 per cent after an increase of 7.7 per cent in fiscal 1983.

States reporting double-digit increases in higher-education appropriations for fiscal 1984 include Mississippi, up 17 per cent after a decline of 1.4 per cent last year; Indiana, up 16 per cent this year after a 10-per-cent reduction last year; Arizona, up 15 per cent after last year's cut of 4.6 per cent; Washington, up 14 per cent, following a budget last year that was unchanged from the year before; and Oregon, up 13 per cent after last year's decline of 4.8 per cent.

Using Up Reserves

To cover budget gaps that were unfilled by state appropriations, some institutions have had to use reserve funds and other "one time" sources of money that will not be available for operating expenses next year.

In South Dakota, where revenues are lagging because of a continuing recession in its farm economy, the state colleges and universities increased their operating budgets slightly, despite reductions in their state appropriations.

In fiscal 1983, appropriations for higher education in South Dakota were down 6.3 per cent, but operating budgets rose 2.2 per cent. For fiscal 1984, appropriations were cut another 1 per cent but operating budgets are up 1.7 per cent over last year.

The appropriations cuts were offset by shifting funds and using reserves, as directed by the legislature.

Instead of giving South Dakota State University more money for fuel, for example, the legislature told it to burn the stockpile of coal on its campus, reducing the reserve from two or three years' worth to a 30-day supply. Similarly, the other South Dakota campuses were told to use up the reserve supplies of fuel oil that they had built up as a hedge against another oil shortage.

Some of the money in the state's higher-education facilities fund, which gets 20 per cent of tuition revenues to finance new buildings, was diverted to college operating budgets.

Operating budgets of the South Dakota institutions were further strengthened by raising tuition rates: 7.5 per cent this year, on top of a 7-per cent increase last year.

In Minnesota, where state revenue shortfalls had forced four mid-year cuts in college funds since 1980, the legislature increased the higher-education appropriations for 1983-84 by 18 per cent over the previous year's total.

Tuition's Share Increased

At the same time, the Minnesota legislature adopted a new budget policy that increases the share of instructional costs to be supported by tuition. Under the new policy, appropriations are made on the assumption that tuition revenue will equal a specified share of the costs of instruction.

For the University of Minnesota, tuition revenue in fiscal 1983 equaled about 30.1 per cent of instructional costs. That percentage will be increased, under the budgeting-policy formula, to 31 per cent in fiscal 1984 and 32 per cent in fiscal 1985. In dollars, that means tuition revenue per student will rise from $1,448 in 1983 to $1,819 in 1985, an increase of 26 per cent. The actual tuition charged will be established by governing boards of the institutions, which may vary the tuition rates according to program, level or cost of instruction, and other criteria.

In the next two years, the Minnesota Higher Education Coordinating Board said, the new policy will increase tuition's share of instructional costs from 25.3 per cent to 31 per cent in the state-university system, from 29.1 per cent to 32 per cent in the community colleges, and from 15.2 per cent to 25.7 per cent in the area vocational-technical institutes.

The decline in oil prices dramatically changed appropriations for higher education in Oklahoma. When the legislature voted funds for 1982-83, the oil revenues upon which the state was heavily dependent looked ample. Appropriations for higher education were increased nearly 23 per cent over the previous year's total.

Oklahoma's revenues, however, soon dropped sharply under the impact of falling oil prices, and the legislature, in special session, reduced by 4 per cent the appropriations it had made earlier for all state agencies, including colleges and universities. For 1983-84, higher-education appropriations were held at the reduced level.

To ease the budget squeeze for Oklahoma colleges and universities this year, the legislature authorized, and the board of regents approved, a 10-per-cent increase in the general enrollment fee charged to all students, plus an additonal 15-per-cent increase in fees for out-of-state students.

32 Endowments in Study Invested in Ventures

WASHINGTON

A national survey indicates that about 18 per cent of American colleges and universities invested some of their endowment funds in business ventures in fiscal 1982.

With partnerships between universities and businesses being discussed enthusiastically on many campuses, the venture-capital investments may have increased since the survey period.

The survey of endowment investments in fiscal 1982 found that most of the colleges and universities making venture-capital investments limited them to not more than 5 per cent of the total value of their endowment.

The survey, conducted by the National Association of College and University Business Officers, found 32 of 180 participating institutions had made investments in venture capital during the year ending June 30, 1982.

All but one of the institutions with venture-capital investments were private and most had large endowments. Twenty of the 32 institutions had endowments with total market value of more than $100-million.

The individual institutions in the survey were not identified by NACUBO.

Many colleges restrict their investments of endowment funds to securities offering relative safety. The survey found that in fiscal 1982 the average endowment fund consisted of stocks, 52 per cent; bonds, 28 per cent; short-term securities, 14 per cent; real estate, 3 per cent; and miscellaneous, 3 per cent.

Overall, college and university endowments showed a net loss—the change in market value plus dividends and interest—of 0.9 per cent in fiscal 1982, according to an earlier NACUBO report.

In exploring the nature of miscellaneous investments, the NACUBO survey found only a few institutions investing in the futures market, where securities and commodities are bought and sold for delivery at a future date: four in financial futures, one in gold futures, and one in corn and hog futures. Three institutions said they had investments in the gold market.

About a fourth of the institutions said they had invested in foreign securities and another fourth said they had no foreign investments but had no policy against such investments.

—JACK MAGARRELL

Quality

Continued from Page 1

Duke and Case Western Reserve Universities, have discontinued teacher education.

On most campuses, deans and directors of teacher education are taking another look at their admission and "exit" standards, which still allow many students with weak academic preparation to become teachers.

Scrutinizing the Curriculum

Educators are also scrutinizing the curriculum, which tends to be heavy on theory and skimpy on practical experience, for better ways to prepare students for the "real" world of the classroom.

They are re-evaluating "in-service" or continuing-education programs, which critics call irrelevant and inadequate.

Although teacher educators are not sure which of their efforts—if any—will help solve the problems, they have begun to try a variety of things. For example:

► The University of South Carolina has eliminated undergraduate degrees in education and moved the education courses into the college of arts and sciences. Students will be mathematics or history or English majors and receive their degrees in those subjects.

Requirements for prospective teachers have been increased from 120 to 138 credit hours and now include more mathematics and foreign-language training. Potential elementary-school teachers must complete 18 credit hours in an academic subject taught in elementary school. For students planning to be secondary-school teachers, the requirement is 24 hours.

The amount of field experience has been increased 20 per cent.

Following the change, the number of freshmen interested in teacher education more than doubled—from 64 last year to 132 this fall, says John D. Mulhern, dean of education.

► Beginning next fall, the University of Florida will offer a five-year degree program called "Proteach," which David C. Smith, the dean of education, describes as "a sweeping departure" from traditional teacher-training programs.

To develop the curriculum, he says, faculty members asked three basic questions: What should beginning teachers know? What should they be able to do? What kind of people should they be?

From the answers, faculty members devised the expanded program, which will include general and professional studies, an academic specialization, clinical experience, and practice teaching. Graduates will receive a master's degree in elementary, secondary, or special education.

► The University of Southern Maine has just begun an experimental six-month program that offers people who want to make a career change an opportunity to become high-school teachers.

The first 16 students, selected from among 60 applicants, have completed a six-week session with courses in educational theory and other traditional subjects. They are working this fall as interns in Portland's secondary schools. In January they will be certified to teach in Maine's high schools.

The experiment was designed with high-school reform in mind, says Loren W. Downey, dean of education. "These students are socially committed people who have become discouraged about their ability to influence society through the usual channels," he says. "When they enter high-school teaching from another career, they will be interested in improving the condition of the schools. They understand that a quick fix is not enough. They will be strong participants in long-term change."

► Jersey City State College has just completed a five-year program in which students, beginning in their sophomore or junior years, spent five semesters studying and working full time in the public schools.

The program, which began in 1977, was designed by faculty members and students in the School of Professional Studies and Education—together with elementary-school teachers—to provide a total immersion for potential teachers in the inner-city schools.

The curriculum included special courses treating culture shock, racial prejudice, and urban social situations. Faculty members were assigned full time to the schools to instruct the students and supervise their practice teaching. Students either graduated from the program as "professional teachers" or "got a taste of what teaching is really like and selected themselves out," says Janice R. Boone, associate dean of education. The program, which is now being revised, also became "a shelter workshop for education faculty members, who have re-thought their perceptions of the inner-city schools," she says.

► Towson State University has just completed a three-year project in which 75 "teacher consultants" were trained to conduct writing workshops and seminars for classroom teachers. Each year since 1981, the college of education has selected 25 experienced writing teachers to participate in a five-week summer institute, improve their teaching skills, and become consultants or "master teachers."

"The best teacher of a teacher is another teacher," says Gloria Neubert-Loudermilk, co-director of the program, which is modeled on the Bay Area Writing Project in California. Because the approach was so successful, she says, some of the teacher consultants offered a similar program last summer for 50 elementary- and secondary-school students who were aspiring writers.

► The trustees of the California State University system recently approved a policy that, among other things, calls for the 19 campuses to make admission to education programs more rigorous, to require teacher candidates to demonstrate competence in subject matter and basic skills, and to develop a two-step teaching credential with a provisional certificate for beginners and a full professional credential for experienced teachers. Many campuses have begun to implement the recommendations.

The new systemwide policy "places the schools of education in a good position to implement things we have long wanted to do. Now we have a mandate from the top," says Ernest F. Garcia, dean of education on the San Bernardino campus.

Reaction to Calls for Reform

Teacher educators differ in their views about current responses to the call for reform in their field. Some think their programs are getting more than their share of criticism. Others worry that changes, while they may be necessary, are being made too quickly.

They say some reforms are superficial, affecting only the structure of programs and not the content, which is where the problems lie.

"Teacher education has become a scapegoat for all that is wrong with education," says Anne Flowers, dean of education at Georgia Southern College and president of the American Association of Colleges for Teacher Education.

"As professional educators, we recognize the inadequacies of some of our programs," she says. She adds, however, "With the declining quality of our applicant pool, we have made a significant effort to improve our recruiting."

Norene F. Daly, director of teacher education at Madonna College, cautions that "the redesign of teacher education must not be a revolutionary process but an evolutionary process."

"We must not react too quickly to our critics," she says. "We must make sure that changes have their foundation in the knowledge base and are not just a quick fix."

FACT-FILE

A Profile of 1981-82 Recipients of Doctorates

	Arts and humanities	Computer sciences	Education	Engineering	Life sciences	Mathematics	Physical sciences	Social sciences	All fields*
Doctoral degrees conferred†	3,560	220	7,226	2,644	5,565	720	3,348	6,250	31,048
Sex									
Male	57.6%	90.9%	51.2%	95.3%	72.3%	86.7%	86.3%	63.3%	67.6%
Female	42.4%	9.1%	48.8%	4.7%	27.7%	13.3%	13.7%	36.7%	32.4%
Racial or ethnic group‡									
American Indian	6	1	29	3	12	1	3	20	77
Asian	55	12	112	246	211	32	156	130	1,000
Black	103	1	606	20	72	6	29	244	1,133
Puerto Rican	27	—	43	11	12	1	8	31	138
Mexican-American	26	—	78	4	19	1	5	49	191
Other Hispanic	79	1	64	20	37	4	20	56	283
White	2,769	136	5,353	1,099	4,148	436	2,359	4,666	22,062
Other or unknown	189	4	117	58	142	18	78	118	649
Citizenship									
United States	84.7%	65.0%	86.6%	44.1%	80.4%	63.6%	75.0%	81.8%	78.3%
Foreign	10.2%	32.3%	9.9%	50.1%	16.6%	32.4%	21.9%	12.6%	17.4%
Unknown	5.1%	2.7%	3.5%	5.9%	3.0%	4.0%	3.1%	5.6%	4.3%
Marital status									
Married	55.7%	53.6%	67.1%	61.5%	58.5%	49.7%	54.1%	55.4%	59.4%
Not married	37.8%	42.7%	28.3%	31.7%	37.1%	45.3%	41.4%	37.6%	35.1%
Unknown	6.5%	3.6%	4.6%	6.8%	4.4%	5.0%	4.5%	7.0%	5.5%
Median age at doctorate	34.0	29.9	37.4	30.7	30.3	29.4	29.2	32.3	32.5
Median number of years from bachelor's degree to doctorate	11.2	7.7	13.6	8.0	7.6	7.0	6.8	9.2	9.6
Per cent with bachelor's degrees in same field as doctorate	61.1%	17.7%	39.9%	72.4%	41.4%	79.6%	77.2%	57.4%	53.5%
Planned postdoctoral study									
Fellowship	2.9%	4.5%	1.0%	3.1%	28.0%	8.1%	14.5%	6.1%	8.9%
Research associateship	0.8%	5.9%	1.1%	7.9%	15.7%	5.8%	22.9%	2.7%	7.1%
Traineeship	0.3%	0.5%	0.5%	1.5%	1.8%	1.3%	0.4%	1.8%	1.0%
Other	1.4%	0.0%	0.7%	0.5%	5.1%	0.4%	0.7%	1.1%	1.6%
Planned postdoctoral employment									
Educational institution	66.9%	35.5%	64.8%	22.3%	22.2%	54.7%	11.9%	41.2%	42.8%
Industry or business	7.5%	40.0%	7.1%	43.6%	10.3%	14.2%	35.4%	12.7%	15.4%
Government	2.8%	7.3%	9.4%	9.7%	6.9%	6.4%	6.0%	11.7%	8.0%
Nonprofit organization	3.8%	1.4%	5.6%	1.6%	2.0%	0.6%	0.7%	10.1%	4.9%
Other or unknown	4.7%	1.4%	4.1%	2.4%	2.2%	2.2%	1.3%	5.0%	3.4%
Postdoctoral status unknown	8.8%	3.6%	5.8%	7.5%	5.7%	6.4%	6.2%	7.8%	6.8%
Primary postdoctoral work									
Research and development	5.4%	64.4%	5.2%	63.6%	49.4%	41.5%	72.1%	20.5%	26.1%
Teaching	73.2%	25.5%	37.9%	20.9%	27.9%	48.3%	15.1%	36.4%	38.7%
Administration	6.7%	0.7%	34.9%	1.5%	4.9%	0.7%	2.1%	8.3%	14.0%
Professional services	4.6%	4.0%	13.1%	6.5%	8.6%	4.0%	3.2%	27.6%	12.9%
Other	5.5%	2.7%	2.5%	2.0%	3.9%	1.9%	3.5%	2.9%	3.2%
Unknown	4.7%	2.7%	6.5%	5.4%	5.3%	3.5%	4.0%	4.3%	5.1%
Region of employment after doctorate									
New England	7.5%	10.1%	5.4%	5.5%	4.9%	5.0%	5.1%	7.4%	6.0%
South Atlantic and Mid-Atlantic	30.7%	30.9%	28.0%	28.9%	25.0%	33.5%	34.4%	34.5%	30.4%
North Central	21.0%	12.7%	22.1%	15.9%	18.7%	17.5%	16.4%	19.1%	19.6%
South Central	12.2%	11.4%	15.1%	10.7%	13.0%	11.8%	15.3%	9.7%	13.1%
Mountain	3.9%	6.7%	4.9%	5.5%	4.9%	4.2%	5.5%	4.8%	4.9%
Pacific and insular	9.9%	18.8%	9.7%	15.0%	10.0%	11.6%	12.7%	9.9%	10.6%
Foreign	7.3%	6.7%	7.1%	13.7%	19.3%	12.7%	6.5%	8.9%	9.6%
Region unknown	7.5%	2.7%	7.7%	4.7%	4.0%	3.8%	3.9%	5.7%	5.9%

Note: Figures do not include first professional degrees, such as M.D. or D.D.S.

* Includes degree categories not listed separately.

† Includes non-U.S. citizens with temporary visas.

‡ Includes only U.S. citizens and foreign persons with permanent visas.

SOURCE: SURVEY OF EARNED DOCTORATES, NATIONAL RESEARCH COUNCIL

CHRONICLE SURVEY

Projections of College and University Hiring in 1983-84

	PUBLIC INSTITUTIONS				PRIVATE INSTITUTIONS				REGIONS				
	Research Universities	Compre-hensive Colleges*	2-Year Colleges	All	Research Universities	Compre-hensive Colleges*	Liberal Arts Colleges	All	East	Midwest	South	West	All Institutions
Number of faculty positions is expected to:													
Increase	30.0%	39.3%	25.8%	29.4%	37.5%	41.4%	32.4%	35.3%	29.9%	41.0%	34.5%	43.0%	31.8%
Decrease	30.0%	14.3%	12.9%	14.7%	12.5%	13.8%	10.8%	11.8%	7.0%	15.8%	13.2%	15.0%	13.5%
Stay the same	40.0%	46.4%	61.3%	55.9	50.0%	44.8%	56.8%	52.9%	63.1%	43.1%	52.3%	42.0%	54.7%
Number of administrative positions is expected to:													
Increase	5.3%	14.3%	12.9%	12.6%	20.8%	17.2%	19.4%	18.9%	28.1%	17.7%	3.2%	19.4%	15.1%
Decrease	31.6%	10.7%	12.9%	13.8%	16.7%	10.3%	5.6%	7.8%	7.6%	10.1%	9.3%	12.5%	11.5%
Stay the same	63.2%	75.0%	74.2%	73.5%	62.5%	72.4%	75.0%	73.3%	64.3%	72.2%	87.4%	68.0%	73.4%
Number of professional-staff positions is expected to:													
Increase	5.6%	9.5%	11.1%	10.0%	9.1%	11.8%	12.0%	11.6%	11.0%	3.9%	6.3%	16.5%	10.7%
Decrease	22.2%	9.5%	16.7%	15.3%	18.2%	11.8%	0.0%	4.8%	8.6%	14.5%	6.5%	2.5%	11.0%
Stay the same	72.2%	81.0%	72.2%	74.7%	72.7%	76.5%	88.0%	83.6%	80.4%	81.6%	87.2%	81.0%	78.3%
Number of clerical-staff positions is expected to:													
Increase	5.3%	11.1%	19.4%	16.3%	12.5%	7.1%	21.1%	16.5%	23.6%	22.0%	5.6%	17.2%	16.4%
Decrease	26.3%	11.1%	9.7%	11.3%	25.0%	10.7%	5.6%	8.6%	8.6%	9.5%	7.0%	15.3%	10.3%
Stay the same	68.4%	77.8%	71.0%	72.4%	62.5%	82.1%	73.2%	74.9%	67.8%	68.5%	87.4%	67.5%	73.4%
Number of trade-and-technical positions is expected to:													
Increase	5.3%	14.8%	7.4%	9.2%	4.3%	9.1%	7.8%	7.8%	19.8%	2.7%	2.5%	14.6%	8.7%
Decrease	15.8%	3.7%	7.4%	7.2%	17.4%	9.1%	1.6%	4.8	5.4%	7.5%	2.7%	11.7%	6.3%
Stay the same	78.9%	81.5%	85.2%	83.7%	78.3%	81.8%	90.6%	87.3%	74.8%	89.9%	94.9%	73.7%	85.1%
Number of auxiliary positions is expected to:													
Increase	10.5%	0.0	4.5%	3.9%	13.6%	3.8%	3.0%	4.1%	7.6%	0.0%	0.0%	4.8%	4.0%
Decrease	5.3%	4.0%	4.5%	4.5%	18.2%	7.7%	3.0%	5.5%	7.4%	6.7%	3.5%	0.0%	4.9%
Stay the same	84.2%	96.0%	90.9%	91.7%	68.2%	88.5%	93.9%	90.4%	85.0%	93.3%	96.5%	95.2%	91.1%
Number of contract-labor positions is expected to:													
Increase	14.3%	0.0%	5.9%	5.6%	5.3%	0.0%	1.9%	1.8%	0.9%	13.5%	3.6%	3.7%	3.9%
Decrease	0.0%	8.3%	5.9%	5.7%	5.3%	7.7%	3.7%	4.6%	8.7%	0.0%	4.9%	0.0%	5.2%
Stay the same	85.7%	91.7%	88.2%	88.6%	89.5%	92.3%	94.4%	93.6%	90.5%	86.5%	91.5%	96.3%	90.8%

* Institutions with more than 1,500 students, a liberal-arts program, and at least one professional program.

Note: Survey data are based on responses from a stratified random sample of 100 public and 100 private colleges and universities. Private two-year colleges and institutions with enrollments under 500 are not included. Technical inquiries about the survey design and sampling techniques should be addressed to John Minter Associates, P.O. Box 107, Boulder, Colo. 80306.

SOURCE: SURVEY FOR THE CHRONICLE BY JOHN MINTER ASSOCIATES

Letters of Recommendation

Continued from Preceding Page

realize that it probably helps applicants to say something about their weaknesses.

Many people say they are suspicious when a letter makes the candidate sound superhuman. Letters that don't seem to offer a balanced evaluation, therefore, are often ignored.

"There are different ways of putting negative comments," notes Ms. Wagoner.

"You could say, 'This person is insecure and I can't figure out his motivation'—that would kill a person right away." she says. "Or you could say, 'This person was insecure during his first year, which may account for some low grades, but he has blossomed since then and done well.' That can be a favorable comment."

But obvious attempts to "offer a negative statement by manufacturing a weakness" can backfire, says Ms. Cornell of Columbia. She says she is especially annoyed by such comments as, "His only weakness is that he has not yet studied business."

"Would that we were all so perfect," adds Ms. Cornell.

Writing an effective letter of recommendation is no easy task, however—even for those who have had extensive experience wading through stacks of them. But veterans of the task say they have picked up some techniques that have improved their own letter-writing skills. Among their suggestions:

"Start with a clean slate," says Elizabeth Day, director of admissions and student affairs at Dartmouth College's Amos Tuck School of Business Administration. Consider what stands out about the applicant and don't let any "laundry list" of questions stop you from pointing out what is most important, she says.

Explain your relationship to the candidate. Make clear how well you know the person, says John P. Hummel, associate head of the chemistry department and chairman of the graduate admissions committee at the University of Illinois. Have you worked closely with the individual? Or is your recommendation based on limited information, such as performance in one course?

Learn about the candidate's career goals before you write. Particularly for students you don't know outside the classroom, it's a good idea to set up an interview with them, says Janet Bickel, staff associate in the division of student programs at the Association of American Medical Colleges. Then ask them to describe an encounter with someone who holds different beliefs from theirs, or ask what they've accomplished during vacation periods, she suggests. That way you can assess a student's motivation and ability to think independently, she says.

Compare the applicant to others. It may not be enough to write that a person has done well, says Ms. Cornell. If it's appropriate, try saying something like, "This is one of the best students I've ever had in this class," or, "This is the best person to have held this job in five years." Also mention the nature and length of your own experience to add credibility, says Mr. Hummel.

Tailor the letter to specific positions or programs. "If I'm looking for a comptroller, I want to know that a person has successfully managed 'x' amount of money and saved 'x' dollars," says Ms. White.

At the N.Y.U. law school, Ms. Curll says, she appreciates knowing how prospective students would benefit from studying in New York City.

Use details to back up your remarks. Use "behavioral" terminology, says Anne S. Devlin, associate professor and chairman of the psychology department at Connecticut College. Give concrete examples, for instance, to show how a teacher conducted a particularly creative laboratory course—or mention a colleague's willingness to accept even the dreariest of committee assignments, she suggests.

Tell applicants honestly how you feel about writing a letter for them. You're under no obligation to write a letter for anyone, so if you feel uncomfortable doing it, say so, says Patricia L. Rose, director of career planning and placement services at the University of Pennsylvania. And if you end up writing a negative letter anyway, at least tell the candidate that you have done so.

Elaborate on the limitations of a position or situation. If a person hasn't had a chance to demonstrate ability in an area that may be essential in a new job, that should be mentioned, says Richard C. Skelton, director of admissions at Bucknell University. Otherwise, prospective employers may assume, perhaps wrongly, that you are avoiding something negative.

Noting that staff reductions have eliminated a position also may be necessary, Ms. Devlin says. For example, a candidate's qualifications may have little to do with a decision to deny him or her tenure—something a search committee needs to understand.

Some letter writers tend to make ambiguous statements, such as, "This person should be well qualified to achieve tenure at your institution," says John L. Margrave, vice-president for advanced studies and professor of chemistry at Rice University. He says he wonders whether such remarks mean that the candidate is "not good enough for our university but will be good enough for you," or whether the writer was merely being careless.

Avoid sexist or racist remarks. References to a prospective faculty member's "attractive wife" are seen less frequently these days, say those who receive recommendations, but they have yet to disappear. "Condescending or sexist remarks turn me off the recommender," says the University of Pennsylvania's Ms. Rose, "and make me wonder about the candidate."

Watch for cultural differences in phrasing. While a remark such as "Mr. Jones is not bad at all" might be considered complimentary for someone accustomed to understatement, says Ms. Rose, "that's not a good thing for a student to have on his record."

Volunteer to provide further information on the phone. Because she has such a busy schedule, Ms. Cornell says she includes her phone number and offers to accept a follow-up call "as a way of saying this is a candidate I feel strongly about." She regards such an offer to her as a sign that the candidate deserves to be taken seriously. To call extra attention to a person, Mr. Skelton of Bucknell says he sometimes initiates follow-up calls himself.

Keep the letter brief. Experienced readers look at the signature first, read the last paragraph, and then decide whether the rest of the letter is worth reading, says Ms. Wagoner. If it's six to eight pages long, she says, then it is almost certain to be scanned. Admissions panels generally find that a page to a page and a half is long enough for most letters. Personnel specialists say several succinct paragraphs often do.

End on an upbeat note. To emphasize your enthusiasm, Ms. Rose suggests, use a punchy phrase: "Hire her—you won't be sorry!"

New Books on Higher Education

It may be necessary to add state tax to the cost of the books listed below. Discounts may be available to scholars and to people who order in bulk.

Evaluating Bibliographic Instruction: A Handbook (Association of College and Research Libraries, 50 East Huron Street, Chicago 60611; 122 pages; $13 for A.C.R.L. members, $17 for nonmembers, prepaid).

Handbook of Student Financial Aid: Programs, Procedures, and Policies, by Robert H. Fenske (Jossey-Bass Publishers, 433 California Street, San Francisco 94104; 500 pages; $25.95 prepaid).

Marginal Costing Techniques for Higher Education, by Richard Allen and Paul Brinkman (Publications Department, National Center for Higher Education Management Systems, P.O. Drawer P, Boulder, Colo. 80302; 80 pages; $6, plus 50 cents for shipping). Marginal cost is the change in total cost that would result from providing educational services to an additional student; employing one of three methods of calculating marginal cost may help institutions and federal and state governments to estimate better the cost implications of changing enrollment levels.

Partners in the Research Enterprise: University-Corporate Relations in Science and Technology, edited by Thomas W. Langfitt and others (University of Pennsylvania Press, 3933 Walnut Street, Philadelphia 19104; 224 pages; $35 hardcover, $14.95 paperback, prepaid).

Patterns in Liberal Arts Curricula: A Survey of Program Models, by Orland W. Kolling (ERIC Document Reproduction Service, P.O. Box 190, Arlington, Va. 22210; 196 pages; $14.40, plus $2.32 for shipping).

Raising Academic Standards: A Guide to Improving Learning, by Ruth T. Keimig (Association for the Study of Higher Education, One Dupont Circle, Suite 630, Washington 20036; 83 pages; $5 for members of A.S.H.E., the American Association for Higher Education, American Educational Research Association, and the Association for Institutional Research, $6.50 for nonmembers, prepaid).

Rational Decisionmaking in Higher Education, by Ellen Earle Chaffee (Publications Department, National Center for Higher Education Management Systems, P.O. Drawer P, Boulder, Colo. 80302; 85 pages; $10, plus 50 cents for shipping).

Research Activities and Funding Programs, 1983 edition, edited by Anthony T. Kruzas and Kay Gill (Gale Research Co., Book Tower, Detroit 48226; the two-volume work has about 355 pages and costs $142.50 prepaid). Describes research programs conducted or supported by private organizations in the U.S.

Sidelines

Further fallout from the drug scandal at last month's Pan American Games:

The U.S. Amateur Basketball Association has decided to test candidates for the American men's and women's Olympic basketball teams for drug use during tryouts next spring.

Edward S. Steitz, president of the U.S.A.B.A. and athletic director at Springfield College, said his group would use the same equipment as that at the Pan American Games to test athletes' bodies for traces of drugs that have been banned by the International Olympic Committee. In previous years, American players have been tested only after they made the team.

"We have never discovered that any of our players have used the illegal substances," Mr Steitz said, "and we're bound and determined we're not going to permit it."

▪

Starting this fall, fans of the University of Illinois and the University of Wisconsin will be able to drink their school spirits.

Two new beverages, Illini Beer and Badger Beer, will be available in Champaign, Ill. and Madison, Wis., homes of the two universities, in time for this football season.

The beers will be identical, except for the labels, according to a University of Illinois spokesman. The labels, he said, will display a modified design of the university's insignia, the school colors, and the school name. The university, however, has no connection with the brewing or sale of the beer.

The school colors and name can be used without the university's consent because they are in the public domain, said Donald Wendell, vice-chancellor of administrative affairs at Illinois.

Mr. Wendell said that the manufacturer had contacted the university, but that Illinois had "no interest in giving indication of approval or endorsement for the product," because of legal restraints.

The creator of the beer, John Freed, is president of Freedom Spirit, Inc., in South Carolina. Mr. Freed was unavailable for comment, but it is believed that he intends to expand the program to include other Big 10 universities.

▪

A University of Iowa women's group has accepted an apology from the institution's football coach, Hayden Fry, for his referring to a woman as a "little dumplin' " in an interview published by a local newspaper.

In the interview, Mr. Fry said that while he was a quarterback on the Baylor University football team in the 1940's, "you could always find a little dumplin' to do the wash and then take her out to eat."

The campus chapter of the Associated Professional and Faculty Women asked Iowa's president, James Freedman, to censure Mr. Fry for his "demeaning and offending remarks which perpetuate the secondary status of women." The request was withdrawn after the apology.

Athletics

Four Universities Threaten to Pull Out of Canadian Football Championship

By MARK GERSON

TORONTO

Unless a last-minute settlement is reached between universities in Canada's Atlantic provinces and the Canadian Inter-university Athletic Union, no football teams from the Atlantic region will be competing this year for the Vanier Cup, Canada's intercollegiate football championship.

The Atlantic Universities' Athletic Association—which represents four football-playing institutions in the eastern Canadian provinces of New Brunswick and Nova Scotia—withdrew from the championship to protest scheduling changes that would have rotated the eastern semifinal game among other Canadian athletic associations.

Until now, the semifinal has been the Atlantic Bowl, Canada's oldest university bowl game. Played annually in Halifax, Nova Scotia, since 1959, the Atlantic Bowl became the Vanier Cup's semifinal in 1967.

According to Ken Bellemare, president of the Atlantic universities' group, the issue is not simply an emotional one. Travel costs for the universities and missed classes for the players would also create problems.

This year's revised schedule would have had the A.U.A.A. champion travel to Toronto to meet the winner of the Ontario Universities Athletic Association in the Atlantic Bowl just a week before the Vanier Cup game in Toronto. "Had our team won," said Mr. Bellemare, "it wouldn't have made sense to return home for a couple of days, only to turn around and go back to Toronto for the Vanier Cup. We would probably have stayed in Ontario for those few days."

Although the C.I.A.U. subsidizes travel expenses, Mr. Bellemare is worried that the additional cost of food and accommodations would be a financial burden to the Atlantic university. Were an Ontario team to travel to Halifax for the Atlantic Bowl, it could more easily return home and then go to Toronto, he said.

Mr. Bellemare said the A.U.A.A. was also concerned by the number of missed classes that such an extended trip would represent for players.

Always a 'Moneymaker'

Another issue is attendance. "When the Atlantic Bowl is held in Halifax," said Larry Uteck, football coach at Saint Mary's University, a member of the A.U.A.A., "we can consistently get 7,000 to 8,000 fans, which they can't seem to do elsewhere. The game has always been shown to be a moneymaker."

The profit generated from fan and sponsor support has prompted the Atlantic universities to offer to cover the costs not paid by the C.I.A.U. to teams traveling to a Halifax Atlantic Bowl. The A.U.A.A. has also asked the national association to launch a study of the costs and scheduling of inter-university football in Canada.

Some players on Atlantic university football teams aren't happy with the situation. The championships, they say, offer them their best chance to show off their talents to scouts from the Canadian Football League. Many of the players say they might have decided to attend institutions in other parts of Canada had they known they would have been excluded from playing in the national championships.

If the players were now to transfer to other institutions, they would not be allowed by the C.I.A.U. to participate in athletics for one year.

Negotiations are continuing between the two associations, but both John McConachie of the C.I.A.U. and Mr. Bellemare concede that it will be difficult to reschedule games to fit in the Atlantic universities once the football season has begun.

If the issue is settled in the coming academic year, the A.U.A.A. will probably be back in the running for the Vanier Cup next year, said Mr. Bellemare.

NCAA to Spend $36.6-Million in 1983-84, Up 14 Pct.

MISSION, KAN.

The executive committee of the National Collegiate Athletic Association has adopted a budget of $36.6-million for the 1983-84 fiscal year—$4.6-million, some 14 per cent, higher than the N.C.A.A.'s 1982-83 budget.

As in past years, nearly two-thirds of the association's income will come from the Division I men's basketball championship.

Another 14 per cent will come from an assessment levied on member-institutions' income from their football teams' appearances on network television.

That assessment was in doubt until recently because of a challenge to the legality of the association's television contracts. In July Justice Byron R. White stayed a lower-court order striking down the contracts, pending an appeal to the Supreme Court in the fall. Since the Court will not decide until October at the earliest whether to review the issue, it appears likely that the contracts will continue unchanged during the current football season.

Should the Supreme Court uphold the lower courts' rulings, however, the N.C.A.A. stands to lose that budget item in future years. It is now $5-million a year and, unless forbidden by the Court, is likely to grow.

In releasing the budget, the association noted that less than 1 per cent of its revenue comes from dues levied on members, and that 60 per cent of its total expenditures go back to members in such forms as transportation to championships, per-diem expenses at championships , and distribution of receipts from championships.

Less than 20 per cent of its income is spent on running the national office, the association said.

Other highlights from the N.C.A.A.'s budget:

► Just as it did last year, the association has budgeted $1.5-million for legal expenses and fees.

► The N.C.A.A. will spend more money to enforce its rules. Last year its enforcement and legislative services department was budgeted for $1.1-million. This year the operations have been separated. The enforcement department alone is scheduled to spend $1.4-million, and legislative services is budgeted for $400,000.

► For the first time, the association has budgeted an operating reserve fund of $1-million.

NCAA's Budget for 1983-84, Compared with 1982-83

Item	1983-84 Budget	1982-83 Budget	Pct. Change
Revenues			
Division I men's basketball championship	$23,755,100	$20,580,000	+15%
Football television assessments	5,081,800	4,531,000	+12%
Other Division I championships	3,350,900	2,888,000	+16%
Marketing	1,134,000	900,000	+26%
Division II championships	946,000	988,000	−4%
Publishing	649,000	579,000	+12%
Investments	575,000	600,000	−4%
Television–films	447,000	304,000	+47%
Membership dues	317,600	299,000	+6%
Division III championships	310,000	305,000	+2%
Miscellaneous	55,600	35,000	+59%
Communications	34,000	32,000	+6%
Total	$36,656,000	$32,041,000	+14%
Expenses			
Championships	$23,553,000	$21,217,000	+11%
Legal	1,500,000	1,500,000	—
Enforcement department	1,434,000	—	n/c
Enforcement and legislative services department	—	1,135,000	n/c
Publishing department	1,354,000	1,280,000	+6%
Communications department	1,070,700	1,536,000	−30%
Administration department	1,041,000	886,000	+17%
Funded operating reserve	1,000,000	—	n/c
Championships department	883,000	783,000	+13%
Promotion	774,000	—	n/c
Committees	754,000	903,000	−17%
General	678,000	604,000	+12%
Development	606,000	613,000	−1%
Television–films	504,300	564,000	−11%
Marketing	458,000	325,000	+41%
Legislative services	369,000	—	n/c
Rent	378,000	408,000	−7%
Postgraduate scholarships	185,000	185,000	—
Research	94,000	100,000	−6%
Total	$36,656,000	$32,041,000	+14%

n/c - not comparable

SOURCE: NATIONAL COLLEGIATE ATHLETIC ASSOCIATION

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News Summary

Articles on inside pages

Black faculty members at predominantly white colleges and universities face a wide range of personal and professional problems. Story on Page 19.

Salary-reduction plans can provide faculty members with nontaxable fringe benefits and a way to do better financially with lower pay. Story on Page 19.

Sticky questions concerning the co-authorship of research papers have prompted the American Psychological Association to draw up guidelines for giving credit to dissertation supervisors. Story on Page 7.

Political scientists are dissatisfied with the current state of scholarship on the American Presidency. Story on Page 7.

Sociological studies of drinking habits and boredom were among the research reports presented at the annual meeting of the American Sociological Association. Story on Page 7.

Research money earmarked by the federal government for small-business innovation may find its way to university researchers. Story on Page 15.

Student athletes at the University of California at Los Angeles can receive special counseling aimed at encouraging them to plan for non-athletic careers. Story on Page 23.

Dennis Brutus, a native of Zimbabwe on the faculty of Northwestern University, has been granted political asylum in the U.S. against the wishes of the Immigration and Naturalization Service. Story on Page 27.

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SALVADOR'S UNIVERSITY: 3 YEARS OF OCCUPATION

PHOTOGRAPH FOR THE CHRONICLE BY CINDY KARP, BLACK STAR

More than three years after it was attacked by the army, the campus of the National University of El Salvador remains closed, patrolled by armed National Guardsmen. See story on Page 27.

Plan to Give Presidents More Power 'Undemocratic,' NCAA Officer Says

Compromise is sought; proposal's backers start lobbying

By N. SCOTT VANCE

The second-highest official of the National Collegiate Athletic Association last week assailed as "undemocratic" a proposal to give university presidents effective control of the N.C.A.A. He said he hoped some compromise could be reached to modify the plan.

The special committee of college presidents that tentatively endorsed the proposal mailed copies of it to the heads of the 787 institutions that belong to the N.C.A.A., in an effort to explain their position and solicit their colleagues' reactions to it. The text of the proposal appears on Page 24.

Members of the panel have said they are willing to consider changes in their tentative plan but are unlikely to agree to compromises that would not give the presidents significant power to control the association.

The 40-member committee, sponsored by the American Council on Education, also plans to give seminars in conjunction with forthcoming education-association meetings to answer questions that other presidents have about the proposal.

'Board of Presidents'

The panel wants to establish a 36-member "board of presidents" within the N.C.A.A. that would have the power to veto rules or practices of the association and to impose rules of its own design on N.C.A.A. members.

Members of the board would be elected to three-year terms by presidents of N.C.A.A. institutions. The board's actions could be overruled by a majority vote—taken by mail—of the presidents of N.C.A.A. institutions.

John R. Davis, secretary-treasurer and No. 2 officer of the N.C.A.A., said the chief problem with the proposal was that it would vest too much power in the board. He criticized the plan in an interview last week, after he attended a meeting in Chicago between members of the N.C.A.A. council, the association's governing board, and members of the A.C.E. panel. Before the meeting, N.C.A.A. officials had declined to comment extensively on the proposal.

Mr. Davis said the proposed board of presidents would be much the same as a "banana dictatorship" that has the power

Continued on Page 24, Column 1

U.S. Drops Plan for Soviet Talks on Exchanges

Action is part of response to destruction of airliner

By MALCOLM G. SCULLY

WASHINGTON

The Soviet Union's destruction of a South Korean airliner has abruptly ended the United States' plans to resume negotiations with the Russians on a new agreement for cultural, scientific, and scholarly exchanges.

Responding to the incident, in which 269 people were killed, President Reagan announced last week that the negotiations would remain suspended. Only a week earlier, the State Department said the two governments had agreed to reopen discussions of the pact.

At issue is a 1958 agreement that laid the groundwork for most of the subsequent scientific and scholarly exchanges between the two countries. The agreement expired in 1979 and has never been renewed, primarily because of the chill in East-West relations brought on by the Soviet intervention in Afghanistan, the arrest in 1980 of the physicist Andrei D. Sakharov, and Russian support for the imposition of martial law in Poland.

There have been no exchanges of performing-arts groups or of cultural exhibits since 1979, but some scholarly exchanges have continued, including Fulbright lectureships and exchanges for research in the humanities and social sciences, administered by the International Research and Exchanges Board, known as IREX.

"The exchanges have continued in an ambiguous framework where there is no signed treaty but where the two countries are observing the conditions that would have been in effect if there had been a

Continued on Page 31, Column 1

At least two universities have canceled games with a Soviet basketball team that is scheduled to tour the U.S. See Page 23.

U.S.-Soviet Exchanges: a Chronology

1958: The United States and the Soviet Union sign a general agreement on "contacts, exchanges, and cooperation in scientific, technical, educational, cultural, and other fields." The agreement will serve as the framework for many subsequent exchanges between the two countries. Scholarly exchanges of graduate students, young faculty members, senior scholars, and teachers of English and Russian are approved, to be administered by the Inter-University Committee on Travel Grants.

1959: America's National Academy of Sciences and the Soviet Academy of Sciences sign an "agreement on the exchange of scientists."

1961: The American Council of Learned Societies and the Soviet Academy of Sciences sign an agreement for exchanges in the humanities and social sciences.

1968: The Inter-University Committee on Travel Grants is reorganized as the International Research and Exchanges Board, known as IREX, which con-

Continued on Page 31, Column 2

Note Pad

An attractive "pitch" is a must in advertising these days, even when the ad appears in the stodgy *Federal Register,* published by the government five times a week.

An item in the *Register* from the Selective Service System recently announced the availability of its published rules on draft registration. Eligible male students must register or be barred from receiving federal student aid.

According to the Selective Service, the manual containing the rules "may be purchased for $8.33, chapter dividers for $2.25, and a distinctive three-ring binder for $5.38."

▪

A heated battle over turf has broken out among state officials who administer the federal Guaranteed Student Loan program, and the Law School Admissions Council has been in the crossfire.

The skirmishing began after the admissions council announced that it had made special arrangements to insure that federal loans would be available to eligible law students around the country.

The admissions council said such an arrangement was needed because some law students had had difficulty getting federal loans through standard procedures. Under the council's plan, the First American Bank of Washington, D.C., will make $300-million in federally guaranteed loans over the next three years to qualified law students nationwide. All the loans will be administered by the Higher Education Assistance Foundation—a guarantee agency that usually operates only in five states and the District of Columbia.

The arrangement has riled some officials of other guarantee agencies. They contend that law students have had no trouble obtaining loans in their states. They are worried that the program will take business away from their agencies and banks. Law students are particularly desirable customers because they tend to take out large loans, which are more profitable for banks and guarantee agencies to handle.

"They're taking the cream of the crop of loans out of the state agencies," said Paul P. Borden, head of the Kentucky student-loan agency. It is by making larger, more profitable loans that banks can afford to make smaller, less attractive loans to other students, Mr. Borden said.

▪

Bruce I. Zimmer, vice-president of the law-school council, defends the new effort, saying it was not intended to encroach on the business of state agencies, but is a back-up for students who cannot obtain loans.

"I can't see where it does any harm for the opportunity to be available, even if the need is being met," added Richard C. Hawk, president of the Higher Education Assistance Foundation. He conceded that, as others fear, the program might draw some business away from other guarantee agencies. But then he asked, "Whose interest do we want to serve? The interest of guarantee agencies or of the students?"

Washington

Law Allotting U.S. Funds to Small Companies Now Seen Benefiting University Researchers

By KIM McDONALD

WASHINGTON

University researchers may benefit from a law they once vigorously opposed, when 11 federal agencies begin setting aside part of their research budgets this fall for small-business innovation.

Under the law, passed by Congress last year, companies with 500 or fewer employees can seek research contracts from funds set aside for them by federal agencies with annual research budgets of more than $100-million.

In numerous Congressional hearings last year, university officials complained that the legislation would drain limited federal research support from their institutions. Universities now receive about half of the basic-research awards made by the federal government. Small-business lobbyists argued that they needed the special allocations to compete with universities and large corporations for federal dollars.

Although federal agencies could, by some estimates, reserve as much as $450-million for small-business innovation by fiscal 1987, Congressional aides and agency officials say some of the money will eventually find its way to universities to support faculty members who serve as consultants, graduate students hired to do research, and research facilities used by the companies.

One-Third for Consultants

Under the law, small businesses may spend as much as one-third of the money on consultants or other subcontractors.

Directors of small-business programs at several federal agencies say many of the 9,000 research proposals they have received so far have proposed using academic consultants or giving subcontracts to universities.

At the Department of Agriculture, where 268 proposals have been received for 16 small-business contracts this fall, most propose to share work with university researchers or to use university-owned facilities, said Holly A. Schauer, manager of the program. Because of the availability of researchers, research crops, and relatively cheap field space at universities, she said, the institutions are attractive to small companies that want to conduct agricultural demonstration projects.

"I feel very comfortable that the universities are so involved in it," added Ms. Schauer, who also manages the agency's competitive-grants program. "We know that universities have had experience with the government," she said, and can share that experience with the companies.

The National Science Foundation has been making research awards to small businesses for the past six years under a program that served as a model for other agencies.

Roland Tibbetts, one of the managers of the N.S.F. program, said half of his agency's small-business research awards last

Continued on Following Page

Proprietary-School Students Rely Heavily on Loans

By JANET HOOK

WASHINGTON

Students who attend proprietary schools rely heavily on loans and other forms of "self help" to finance their education because they have limited access to other sources of money, says the National Commission on Student Financial Assistance.

Proprietary-school students "must dig deeper into savings, work in part-time jobs, or sacrifice financially to a much greater degree than those enrolled in other more traditional sectors of postsecondary education," the commission said in a report released last week. "These apparent inequities must be dealt with in a thorough reconsideration of the federal policies of financial aid."

Most Likely to Default

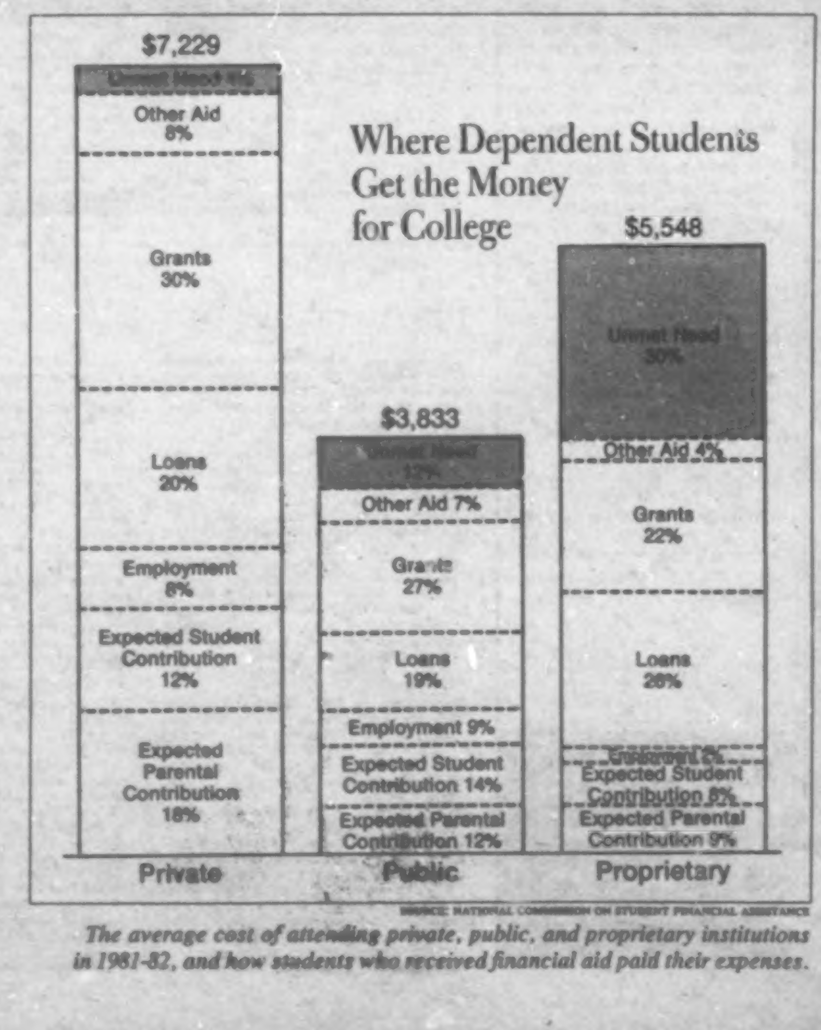
Richard T. Jerue, chief executive officer of the commission, said the federal government might also want to consider reducing proprietary-school students' reliance on loans, because they have been found to be among the most likely borrowers to default.

The report was based on a study prepared by Wellford W. Wilms, associate professor of education at the University of California at Los Angeles, of needy proprietary-school students who received aid in 1981-82, and on comparable information about financial-aid recipients at public and private colleges.

Only 70 per cent of the estimated costs incurred by proprietary-school students who are financially dependent on their families, were covered by financial aid and by the money the students and their families were expected to contribute under student-aid eligibility formulas.

Mr. Wilms said students typically make up the difference, known as "unmet need" in financial-aid jargon, by cutting their living expenses and contributing more from their own resources than is expected under the formulas.

Because proprietary-school students were found to rely so heavily on loans—which covered 26 per cent of their costs—some educators are worried about reports that they have had trouble finding banks willing to make federal Guaranteed Student Loans. Because evidence of the problem has been anecdotal thus far, the financial-aid commission has asked Mr. Wilms to do a follow-up study on it.



SOURCE: NATIONAL COMMISSION ON STUDENT FINANCIAL ASSISTANCE

The average cost of attending private, public, and proprietary institutions in 1981-82, and how students who received financial aid paid their expenses.

Sept. 21, 1983

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News Summary

Articles on inside pages

Community colleges in California face a budget cut of $108-million, which could mean cancellation of 15,000 classes. Story on Page 11.

Economist Lester C. Thurow finds all of today's dominant economic theories wanting in *Dangerous Currents: The State of Economics*. Story on Page 5.

A college student claiming ties to wealthy figures now faces 37 indictments for embezzlement and forgery. Story on Page 10.

"See before you sign" is a vital rule for colleges purchasing a computer system. Story on Page 12.

A challenge to enforcement of a law barring sex bias is one major higher-education issue facing the Supreme Court. Story on Page 15.

The Justice Department wants civil-rights agencies freed from deadlines for resolving bias complaints. Story on Page 15.

A committee of the National Collegiate Athletic Association wants to increase college presidents' role in the organization, but not their direct control. Story on Page 21.

Twenty Soviet scholars due to spend a year at American universities have been called home by their government. Story on Page 25.

The National University of Nicaragua is flourishing despite the country's economic and political problems. Story on Page 25.

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Libraries Urged to Close Stacks to Halt 'Epidemic of Theft'

All but 25 pct. of incidents estimated to be 'inside jobs'

By **BEVERLY T. WATKINS**

OBERLIN, OHIO

If college libraries are to halt the "epidemic of theft" that has plagued their rare-book collections in recent years, they must take valuable books out of circulation and close their stacks, no matter how strong the objections of independent researchers, faculty members, and students, librarians were told last week.

Officials of law-enforcement agencies, organizations of antiquarian booksellers, and colleges and universities themselves had further advice for the librarians:

► They must mark all their rare books and manuscripts with indelible ink, no matter what the cost, and keep complete records on each item to establish ownership.

► When they find materials missing and think they have been stolen, they must not conceal the crime and must report the theft immediately to law-enforcement personnel.

► If they find someone stealing, whether it is an outsider or a "trusted employee," they must apprehend the thief. They must stop being forgiving, especially of thieves from the local community, and must prosecute the criminal for the crime. They must press for a sentence that is more than a "slap on the wrist."

At a conference convened to address the growing problem of rare-book theft, the librarians were told that if they take steps to increase security, they may be able to reduce losses from their valuable collections. If they do nothing, mil-

Continued on Page 10, Column 1

Campus Is Scene of Running Battle in Chilean Strife

By **DOUGLAS TWEEDALE**

SANTIAGO, CHILE

Raul Vargas didn't expect to find a full-scale riot in progress when he arrived at the University of Santiago campus here for a meeting with his chemistry tutor the other day.

"Someone told me there was going to be a demonstration, but this is dangerous," he told a reporter as he ducked behind a building to avoid flying rocks.

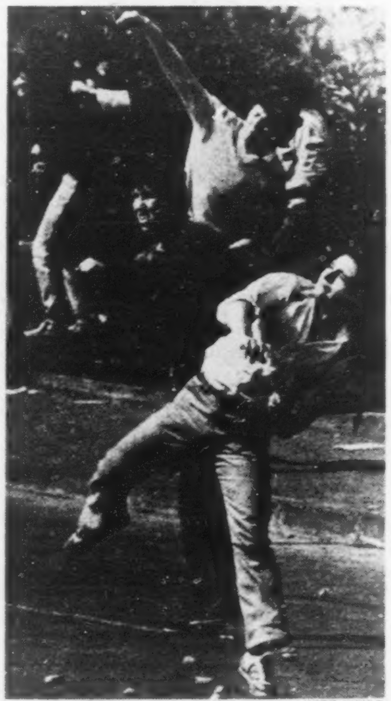
His remark came during a running battle between pro- and anti-government students that erupted at the normally tranquil Chilean university on the eve of this month's "national day of protest" against the 10-year-old military regime of President Augusto Pinochet Ugarte.

When about 2,000 students attempted to hold a rally to protest the military's control of Chile's university system, they were met by a smaller but better-organized group of students who had pledged to "defend our university" against the "Communist intruders." Verbal insults traded by the two groups soon degenerated into fist fights, and then a hail of stones.

Volleys of Rubber Bullets

The campus police appeared from behind a nearby administration building when the anti-Pinochet demonstrators seemed to be gaining the upper hand and immediately began firing volleys of rubber bullets at the crowd. Outside, squadrons of federal riot police armed with tear gas and water cannons stood by, apparently wait-

Continued on Page 28, Column 3



WIDE WORLD

Students hurl rocks at police during "national day of protest" in Santiago, Chile.

School Reforms May Sap Funds for Colleges

In long run, however, 'golden opportunity' seen

By **KAREN J. WINKLER**

The national attention being given to the problems of elementary and secondary education will intensify competition between the public schools and higher education for their share of state revenues—at least in the short run—according to many state lawmakers and education officials.

"State legislators are going to be primarily looking at kindergarten through grade 12," says Wilhelmina R. Delco, a Texas legislator. "They'll have to make either-or decisions, and institutions of higher education will be on the defensive."

"In most states, the proposed reforms in elementary and secondary education are likely to take money away from postsecondary education," says John Augenblick, director of the finance center at the Education Commission of the States.

In the long run, however, observers believe that recent reports calling for reforms of elementary and secondary education could bring about closer cooperation between higher education and the schools.

Already Stimulating Cooperation

"This is a golden opportunity to get public schools and higher-education people meeting together to talk about reform at all levels," says Mark D. Musick, director of state services for the Southern Regional Education Board.

"There are already some very good signs that the reports are stimulating that cooperation," says Robert C. Andringa, executive director of the Education Commission of the States.

The problem for higher education is that the suggested reforms in the public schools that have gained the most attention—merit pay for teachers, longer school days, and longer school years—all cost a lot of money.

"If anyone is able to convince their legislators that, to attract good teachers, they must pay more, it will have a dramatic effect on state budgets," Mr. Augenblick says. "It will take money from postsecondary education."

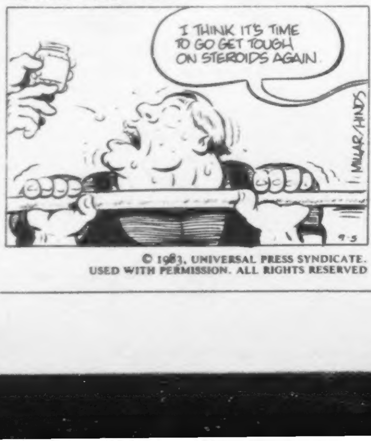
Interviews with legislators and other ob-

Continued on Page 14, Column 1

When Athletes Use Drugs

New reports of drug use among athletes have prompted a growing number of colleges to reexamine their policies. See the "Athletics" section, which begins on Page 21.

TANK McNAMARA



I THINK IT'S TIME TO GO GET TOUGH ON STEROIDS AGAIN.
MILLAR/HINDS
9-5

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Swarthmore Student-Center Fire Blamed on Arsonist

PHILADELPHIA INQUIRER/CLEM MOONEY

SWARTHMORE, PA.

An early-morning fire that gutted Swarthmore College's student center was probably caused by an arsonist, fire investigators told college officials last week.

It was not yet known who might have set the fire, or why, said Lorna Shurkin, a spokesman for the college.

One firefighter was slightly injured in the blaze, and residents of two dormitories near the student center were temporarily evacuated because sparks were being blown toward their buildings.

The gutted building, the Tarble Social Center, contained student lounges, a coffee shop, an audio-visual equipment room, and the offices of a number of student organizations.

The building was constructed in 1906 as Swarthmore's library and was converted into a student center in 1968. An addition built in 1926 remained standing last week, but structural engineers had not yet determined whether it was safe to use.

---

vestment in the administration while we are cutting at the level where people are doing teaching and research," said Allen Menlo, a professor of education.

American Council, AFL-CIO Plan Joint Venture

The American Council on Education and the A.F.L.-C.I.O. will establish the Labor/Higher Education Council as a forum for joint discussions about issues related to the changing nature of work and its implications for higher education.

When fully organized, the council will have a membership of about 60, half from higher-education organizations and half from labor.

Initially, members will meet twice a year to consider such topics as structural unemployment, retraining workers, and continuing education.

Staff members for the new venture include Jerry W. Miller, who is vice-president for academic affairs and institutional relations at the A.C.E., and Dorothy Shields, director of education at the A.F.L.-C.I.O.

Stanford Names Panel on Hoover Institution

The Stanford University board of trustees has appointed a permanent committee to examine the relationship between the university and the Hoover Institution on War, Revolution, and Peace.

The action was recommended by an *ad hoc* board committee created in June after the faculty senate proposed that the relationship be reviewed in light of growing controversy over the conservative institution, which is located on the Stanford campus.

The board said the committee should report from time to time on "matters of governance, appointments, and sharing of scholarly resources."

Declines Seen in Number of College-Library Jobs

Jobs for librarians in public and special libraries will increase in the next decade, while positions in school and college libraries will decrease, according to a study by the Department of Education.

The study projected a balance between supply and demand for librarians through 1990, noting that the number of graduates from library schools in that period was expected to equal the number of jobs that will become available as librarians leave the profession.

The study found that about half of the 136,000 librarians employed in 1982 were working in schools, about 30 per cent in academic and special libraries, and the rest in public libraries.

Notes

The University of Washington has named its school of international studies after the late Sen. Henry M. Jackson, who died last month. The university has also announced that Senator Jackson's papers will be donated to its library. . . . Columbia University's Graduate School of Journalism has established a Center for the Study of First Amendment Issues. . . . The Kappa Delta Rho fraternity at the University of California at Berkeley has been suspended indefinitely after a group of its pledges ran partially clothed through sorority houses, breaking doors and harassing women.

Correction

Following are corrections of data on tuition and fees that appeared in *The Chronicle*, August 3. A blank in the column for out-of-state tuition indicates the institution makes no such charge.

	1982-83	1983-84	
	Tuition and fees	Tuition and fees	Out-of-state tuition
INDIANA			
St Francis C	$3,298	$3,458	
MAINE			
Husson C	4,275	4,775	
OHIO			
Cincinnati Bible Sem	2,037	2,092	
TEXAS			
Bishop C	2,500	3,000	
U of Texas Dallas	450	450	$1,080
WEST VIRGINIA			
West Va Wesleyan C	3,986	4,360	

Fairleigh Dickinson U. to Phase Out Leadership Institute

RUTHERFORD, N.J.

Students and faculty members in an unusual doctoral program at Fairleigh Dickinson University last week lost their nine-month-long fight to keep the program alive.

The university's trustees, in a special meeting here, affirmed their earlier decision to "phase out" the 12-year-old program of the Institute for Leadership Studies, which awards the doctorate-in-education degree. Most of its 64 students, who have careers in business, health care, social service, education, and other fields, are in their 30's and 40's and are "boat-rockers in their fields," one of them said last week.

The institute's program "allows you a thorough study in your particular discipline from a leadership perspective," said another student, Cynthia D. Niv, who is dean of auxiliary academic services at Union County College. "Part of its uniqueness is that it draws students from such diverse disciplines."

But Fairleigh Dickinson's acting president, Walter T. Savage, said last week that "the appropriateness of the Ed.D. degree is something that we have been seriously questioning for some time." Only about a third of the institute's students, he said, are involved in education careers.

A New Program

He said the institute's five faculty members were already working to devise a new doctoral program to replace the one being phased out. He said he hoped the new program would be better attuned to the needs of prospective students and more consistent with "the mission of the university."

A statement by the university's trustees said the closure had been recommended by "many groups, both internal and external."

But William K. Schoenfisch, who heads his own marketing and communications firm and is a student in the program, said the university administration's efforts to close it began after it was discovered last year that a student in the program had plagiarized parts of his thesis in 1973.

That incident bred controversy because the former student, Ronald H. Lewis, had been a candidate for the job of education commissioner in New Jersey. The university's faculty and its former president, Jerome M. Pollack, recommended that Mr. Lewis's degree be rescinded, but the trustees disagreed.

Ms. Niv said she and other students had asked the administration, the trustees, and state legislators to "give the institute a chance based on the caliber of its current instruction and faculty, and not to judge it on historical events."

'A Bit Avant-Garde'

Mr. Savage said the Lewis affair "was disturbing but was, after all, only a very small part of a program that has been in existence for over a dozen years. The institute did not stand or fall on the behavior of one student."

In any event, said Ms. Niv, the program was "a bit avant-garde, and it came under attack because the academic community has a very traditional eye."

The institute, which will remain open until students currently enrolled have been graduated, is located on the university's campus in Teaneck, N.J.

Press Clippings

Family Circle, in an effort to find out how "Your kids *can* get a good education—and *you* can save money," asked the deans of 30 public and private universities to name "the best state colleges and universities."

"Our survey doesn't purport to be a scientific study," said Katharine Davis Fishman, who wrote the article for the magazine's September 13 issue. "It does, we hope, represent the sort of legwork *you* would do if you had the clout and budget to reach 30 deans or admissions directors via long-distance calls."

When Ms. Fishman added up the deans' votes, she found that they had chosen the following as "Schools of Nationwide Distinction–First Rank": the University of California's campuses at Berkeley and Los Angeles and the main campuses of the Universities of Illinois, Michigan, and Wisconsin.

The deans also chose second-rank schools and "Schools of Mainly Local Distinction." For good measure, Ms. Fishman threw in a list of "Schools You May Not Have Known Were Public"—the College of William and Mary, for instance—as well as three "Finds You May Not Have Heard About": Lincoln University of Pennsylvania, New College of the University of South Florida, and the New Mexico Institute of Mining and Technology.

Speaking of clout: A spokesman for *Family Circle* says each issue has a circulation of between 7 and 8 million.

▪

Rolling Stone's September 29 issue describes—in an article in the magazine's fall "College Papers" supplement—the influence that college radio stations can have in promoting the music of relatively unknown artists.

"College airplay alone can sell an initial 50,000 copies of a record nationwide," one record-company executive told Steve Pond, who wrote the story. Another added, "If a record makes Top Ten on the college chart and stays there for six weeks or so, it almost always starts to move up the commercial charts."

"More often than not," Mr. Pond writes, "the stations are staffed by students who care passionately about new music"—and who are free to play it far more often than are disc jockeys at commercial rock stations.

"I think it's the role of college radio to give input to all of us in commercial radio," one station executive told Mr. Pond. "They should stay a little more progressive than the 'Rock of the Eighties' format and find *newer* talent."

The "College Papers" supplement also includes articles on *National Lampoon*, the humor magazine, and on the films playing on campuses this fall.

Among the most popular films, according to the *Rolling Stone*'s survey, are two by John Waters—"Pink Flamingos" and "Polyester"—and a perennial favorite, "The Rocky Horror Picture Show," which one film-sales manager called "the king *and* queen of the college cult filmdom."

—LAWRENCE BIEMILLER

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News Summary

Articles on inside pages

Statistical support for the view that some administrators protect their own numbers rather than hire professors has been suggested by a *Chronicle* survey. Story on Page 21.

Historian Diane Ravitch has documented the nation's efforts to overcome ignorance in *The Troubled Crusade: American Education, 1945-1980*. Story on Page 5.

A district court's decision on sex discrimination in Washington State may have national implications. Story on Page 10.

Faculty members have walked out in protest over budget reductions imposed on California's community colleges. Story on Page 11.

A budget bill approved by the Senate Appropriations Committee includes additional funds for disadvantaged students. Story on Page 17.

Social scientists are asking the Department of Health and Human Services to withdraw a proposed contract that imposes "political" criteria on bidders. Story on Page 17.

The Twin Cities of Minneapolis and St. Paul offer much more than "weather" for scholars who meet there. Story on Page 22.

Championship tournaments in women's sports will be run in the same way as those for men, in an effort by the National Collegiate Athletic Association to cut costs and discourage domination by "powerhouse" teams. Story on Page 28.

Australia may provide more financial support for higher education next year. Story on Page 31.

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NEW THREATS TO DIVERSITY

Colleges to Be 'More and More Alike' by the Year 2000, Researcher Says

By MALCOLM G. SCULLY

Diversity among colleges and universities, long viewed as one of the strengths of the American system of higher education, declined significantly between 1960 and 1980 and faces further threats over the next two decades, according to Robert Birnbaum, a professor of higher education at Teachers College of Columbia University.

His research suggests that by the year 2000 "there will be fewer institutional types and institutions will look more and more alike."

A former chancellor of the University of Wisconsin at Oshkosh and a former vice-chancellor of the City University of New York, Mr. Birnbaum presents his findings in *Maintaining Diversity in Higher Education*, published this month by Jossey-Bass Inc.

To determine whether the system of higher education had become more or less diverse since 1960, Mr. Birnbaum used what he calls the "natural selection model," which treats the evolution of the system of higher education as analogous to the evolution of biological species.

Like the species, he writes, types of institution evolve to fill specific "niches" in

Continued on Page 14, Column 1

Campuses Enter Telephone Business to Defend Against Larger Bills

PHOTOGRAPH FOR THE CHRONICLE BY NORM SCHINDLER

Technological advances and lower costs were incentives for installing a new telephone system at U.C.L.A. Above, the system's central control area.

By JACK MAGARRELL

Colleges and universities are going into the telephone business, prompted by the court-ordered breakup of the Bell System and by the federal government's deregulation of the telephone industry.

More and more institutions are buying their own telephone equipment as a defense against bigger phone bills. By some estimates, the cost of basic phone service could triple in 1984.

A further incentive for institutions to install multi-million-dollar telephone systems comes from the development of new communications technology, including sophisticated electronic switching and higher quality transmission lines for voice and computer hookups. Some universities, a telecommunications consultant says, simply have outgrown the technological limits of their old phone systems.

Whether an institution sets up its own system or contracts with others for service, college administrators are being forced to make choices in an unfamiliar field—

Continued on Page 12, Column 1

Polish Regime Fires 1,329 at Universities

Charges of political purge are denied by government

By VERA RICH

LONDON

The Polish government has fired 1,329 university faculty and staff members, the chief government press spokesman has announced.

Faculty and student supporters of Solidarity, the outlawed independent trade union, cited the dismissals as evidence of a political purge of the universities, but the government spokesman, Jerzy Urban, said the firings had not been based on political attitudes.

Rather, he said, reviews of some 42,250 personnel files in recent months had shown the professors to be inefficient or incompetent.

Mr. Urban's announcement came shortly before a group of university professors and rectors warned that the Polish government's emergency powers, adopted shortly before the lifting of martial law, posed a threat to the autonomy and self-governance of the country's universities.

Councils May Be Suspended

Twenty-five faculty members from the University of Warsaw and five rectors of higher-education institutions in or near Warsaw urged Gen. Wojciech Jaruzelski, Poland's military leader, not to abrogate the relatively democratic procedures for university governance that were adopted in 1980-81.

The emergency legislation, which is to remain in effect until 1985, gives the government the right to suspend elected university governing councils if they act "contrary to law or the public interest," and to dismiss democratically elected university rectors.

It also permits the expulsion of students guilty of "particularly harmful actions against the state" and prohibits the establishment of any new student organization without the permission of the university rector.

Already some of the rectors elected under the democratic procedures have been

Continued on Page 34, Column 2

Eddie Robinson, Coach and Legend

Eddie Robinson, who has coached Grambling State University's football teams for 42 years, is one of only four college coaches to have won 300 games. He's so highly thought of in Louisiana that they've named a stadium for his family.

For details, see the "Athletics" section, which begins on Page 27.

'In' Box

The Supreme Court dealt a blow to the faculty-union movement in 1980 when it held that faculty members at Yeshiva University—a private institution—were not eligible for collective-bargaining protection because they were managerial employees. Now, through legislative efforts in two states, the unions are attempting to preclude such a finding for teachers at public colleges and universities.

Action on the bills—one passed in Ohio and the other pending in Illinois—followed lobbying efforts by all three major faculty unions—the American Association of University Professors, the American Federation of Teachers (A.F.L.-C.I.O.), and the National Education Association. The Ohio measure says faculty members at public institutions cannot be considered supervisors solely because they "participate in decisions in respect to courses, curriculum, personnel, or other matters of academic policy." The Ohio bill was passed in July, but final language on a comparable bill in Illinois has yet to be enacted.

In each case, the relevant provisions were attached to legislation granting collective-bargaining rights to public employees generally.

Gregory A. Humphrey, director of legislation for the A.F.T., says the federation has asked its affiliates to watch for opportunities in other states for legislation to counteract the *Yeshiva* decision.

In Washington, meanwhile, a bill has been introduced in the House to amend the National Labor Relations Act so that faculty members at private colleges and universities are not considered managerial employees. Gerie B. Bledsoe, director of collective bargaining at the A.A.U.P., says it proposed the measure, HR 3291, which includes language almost identical to the Ohio legislation.

■

New restrictions on unauthorized photocopying of copyrighted works surprised many faculty members on their return to classrooms this fall, according to a former university lecturer who is now working for Kinko's Graphics Corporation, a chain of 170 photocopying stores.

The employee, Howard Hawkes, helps teachers get book publishers' permission to copy protected material. Since May, he says, some 250 teachers have called him on Kinko's toll-free number (800-235-6919). He says many of them had to drop assignments they had planned for the fall term because their institutions adopted stricter policies over the summer and there was too little time to get photocopying authorization.

The policies were spurred by an agreement between publishers and New York University, which promised to control faculty copying in exchange for termination of a lawsuit against it and nine professors.

Some faculty members around the country have been circumventing campus restrictions by having students make their own photocopies at self-service copiers, Mr. Hawkes says. But, he says, Kinko's does not condone the practice.

Personal & Professional

Too Many Administrators? A Survey of Colleges Provides Some Grist for Those Who Think So

A frequent complaint of college and university faculty members, especially in times of financial adversity, is that their institutions are overloaded with highly paid administrators and other nonacademic employees.

Instead of hiring more teachers or increasing their pay, they charge, many administrators are inclined to keep their own numbers up at the expense of classroom instruction. And when personnel cuts are made, say the critics, faculty members too often are the ones to go.

Some statistical support for that point of view has been suggested in a nationwide survey for *The Chronicle*. Personnel specialists say the data, which cover reports from 200 public and private colleges and universities for 1980-81 and 1981-82, are more comprehensive than any previously reported. Among the findings:

► At nearly two-thirds of the institutions, at least 60 per cent of all employees in 1981-82 were in nonacademic positions—including administration, clerical work, and trade-and-technical jobs.

► At nearly one-third of the institutions, administrators and other "support" personnel outnumbered faculty members by at least 2 to 1.

► The tendency for administrators and support personnel to outnumber academic employees was far more pronounced at private than at public colleges and universities. Nearly 88 per cent of those institutions had administration-faculty ratios of at least 3 to 2, compared with about 42 per cent of the public institutions.

► The proportion of both public and private institutions with at least 3-to-2 ratios increased slightly over the two years covered in the survey.

The survey data reflect full-time equivalents, rather than head counts.

One faculty member who says he is troubled by such findings is Charles Bryan, professor of mathematical sciences at the University of Montana.

'We Can't Handle All the Students'

"I can't understand why we are hiring more people to run this place when we can't handle all the students enrolling in our courses," he says. "If we don't have enough people to teach the courses, it doesn't really make any difference how many clerical workers there are."

But Gary W. Wulf, vice-chancellor for resource administration in the University of New Hampshire system, questions the value of aggregate data on administration-faculty ratios for large groups of institutions. Such statistics are no more meaningful than average ratios of students to faculty members for an entire institution, he says, because they do not reflect the situation in individual academic units.

Moreover, says Ernest Benjamin, interim dean of the college of lifelong learning at Wayne State University, ratios of administrators to faculty members do not tell the whole story.

"I am more interested in what they do and if they do it well," he says.

Mr. Benjamin, who was president of the Wayne State chapter of the American Association of University Professors before becoming a university administrator two years ago, also disagrees with faculty members who contend that a big bureaucracy causes delays in administrative actions.

Department chairmen and deans, for example, are often unable to respond promptly to faculty requests for action simply because "there aren't enough people to get the job done," he says.

And while such administrative tasks as processing budget requests or redistributing resources "may seem mundane in comparison to the mission of teaching and research," says Thomas A. Kaluzynski, assistant provost for academic administrative services at Ball State University, "when you cut back on that you may ultimately end up boggling the activity of the faculty."

Mr. Kaluzynski, who is also chairman of the academic personnel council of the College and University Personnel Association, adds that he doubts that administrative staffing patterns in higher education will be transformed as dramatically by increased use of microcomputers as will the business and industrial sector.

Need for Flexibility

Administrative staffs are "not likely to be phased out so quickly," he says, because the "creative nature of the academy" demands a certain amount of flexibility that computers may not be able to offer.

Meanwhile, according to *The Chronicle*'s survey, at 45 per cent of all institutions in 1981-82, faculty members outnumbered administrators—excluding clerical,

Continued on Page 26, Column 3

Worsening Ph.D. Job Market Sends Many Out of Academe

WASHINGTON

The number of graduate students who walk out of a university with a new doctoral degree in one hand and a firm job offer in the other has continued to decline, according to a new study by the National Research Council.

The study found that about 60 per cent of those with doctorates in the humanities and 50 per cent of those with science and engineering degrees had commitments for immediate employment when they graduated between 1977-80. About 15 years earlier, however, more than 85 per cent of the humanities graduates and 65 per cent of the scientists and engineers left their campuses with job offers in hand.

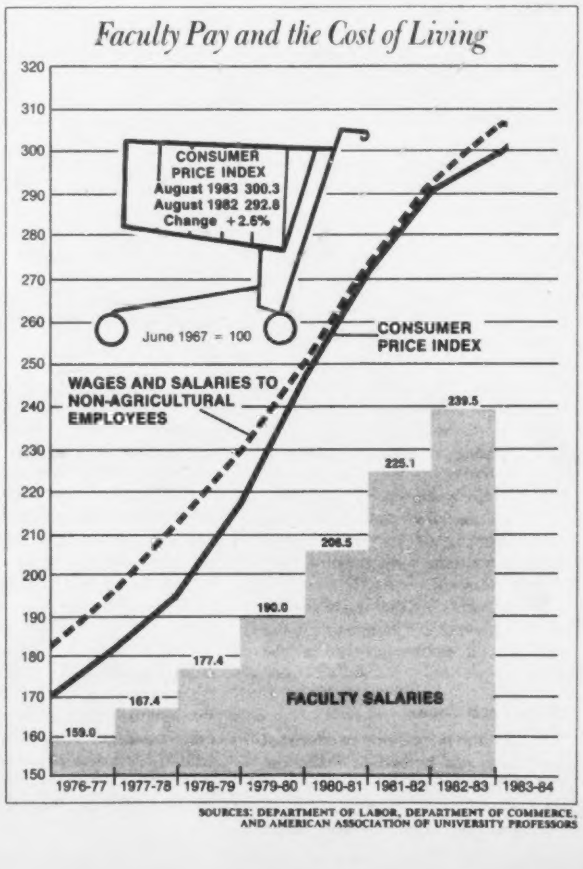
Scientists and Engineers, Particularly

The study also found that a growing number of Ph.D. graduates, particularly scientists and engineers, were taking positions in government and the private sector, rather than in academe, their traditional place of employment. For example, more than 50 per cent of the 1977-80 graduates with doctorates in engineering, mathematics, computer science, and the physical sciences took jobs in business and industry, compared with 38 per cent of that group 15 years earlier.

The study indicated that 75 per cent of graduates with humanities doctorates were employed by two-year and four-year colleges and universities.

The number of Ph.D.'s in the science and engineering fields who had firm plans for postdoctoral appointments also increased during

Continued on Page 25, Column 1


Faculty Pay and the Cost of Living

SOURCES: DEPARTMENT OF LABOR, DEPARTMENT OF COMMERCE, AND AMERICAN ASSOCIATION OF UNIVERSITY PROFESSORS

Job Market

Continued from Page 21

the last decade or so. About 47 per cent of the 1977-80 graduates in the life sciences, for example, had definite commitments for more study after they received their degrees, compared with 27 per cent of that same group 15 years earlier.

The employment study was based primarily on data from the National Research Council's 1981 survey of doctorate recipients in science, engineering, and the humanities. Support for the project was provided by the National Science Foundation and the National Endowment for the Humanities.

Categories Described

For purposes of the study, the science and engineering fields included mathematics, computer science, physics and astronomy, chemistry, earth and environmental sciences, agriculture, medicine, biology, psychology, and the social sciences. The humanities included art, history, speech and theater, music, philosophy, and languages and literature.

Of the estimated 358,000 graduates with science and engineering doctorates in the United States today, the study found that more than 50 per cent had earned their degrees between 1970 and 1980. Of the 76,000 humanities graduates in the country now, 57 per cent earned their doctorates during that period.

Men with doctorates in science and engineering still outnumber women with those degrees, according to a report of the study. However, the number of men who were graduated in science and engineering decreased slightly over the last decade, while the number of women earning those doctorates increased markedly.

Men with doctorates in the humanities also outnumber women with degrees in those fields. But the number of men and women earning humanities doctorates declined in the last decade.

An analysis of academic employment among those who received doctorates within the last decade indicated that a growing number of the younger Ph.D.'s were holding positions that did not lead to tenure.

More than 15 per cent of the scientists and engineers who received their doctorates between 1973 and 1976 did not hold a tenure-track position. The comparable figure for 1977-80 graduates was 25 per cent. Two decades ago, only 4 per cent of the group had jobs that did not lead to tenure.

Tenure Drop in Humanities

In the humanities fields, about 15 per cent of 1973-76 doctoral recipients and more than 25 per cent of 1977-80 graduates held positions that did not lead to tenure. About 22 per cent of 1973-76 graduates and 42 per cent of 1977-80 doctorates were in tenure-track positions but had not yet received tenure. Copies of the report, "Departing the Ivy Halls: Changing Employment Situations for Recent Ph.D.s," are available free of charge. Requests may be sent to the Office of Scientific and Engineering Personnel, National Research Council, 2101 Constitution Avenue, N.W., Washington 20418.

—BEVERLY T. WATKINS

Where Ph.D.'s Are Employed

	Year doctorate granted				
	1960-1964	1965-1968	1969-1972	1973-1976	1977-1980
Physical sciences and engineering†:					
Academic	54.4%	47.5%	38.2%	36.1%	34.2%
Nonacademic	45.6%	52.4%	61.7%	63.8%	65.7%
Business/Industry	34.5%	38.2%	46.1%	50.1%	52.8%
Government	7.8%	10.5%	10.7%	9.3%	7.7%
Other	3.3%	3.8%	4.8%	4.4%	5.2%
Total employed	18,200	24,700	33,400	27,000	21,000
Life sciences‡:					
Academic	67.3%	63.8%	62.6%	58.9%	62.1%
Nonacademic	32.1%	36.2%	37.3%	41.0%	37.7%
Business/Industry	14.1%	16.6%	15.4%	20.1%	19.2%
Government	12.1%	13.6%	14.3%	13.3%	11.5%
Other	5.9%	6.0%	7.6%	7.6%	7.0%
Total employed	9,100	10,700	16,200	15,500	11,200
Social Sciences:					
Academic	71.2%	65.3%	62.1%	57.7%	54.0%
Nonacademic	28.7%	34.4%	37.7%	41.8%	45.8%
Business/Industry	12.4%	17.4%	17.4%	15.9%	16.2%
Government	7.4%	7.4%	8.1%	10.5%	11.3%
Other	8.9%	9.7%	12.2%	15.4%	18.3%
Total employed	8,200	11,200	18,200	21,500	22,500
Humanities:					
Academic	92.9%	86.1%	85.8%	77.0%	75.0%
Nonacademic	6.2%	12.2%	13.7%	22.6%	24.9%
Business/Industry	1.8%	5.8%	5.5%	9.8%	10.1%
Government	0.3%	2.0%	2.4%	5.8%	5.0%
Other	4.1%	4.4%	5.8%	7.0%	9.8%
Total employed	6,000	9,000	14,200	16,600	13,100

† Includes mathematics, computer sciences, chemistry, physics and astronomy, earth and environmental sciences.

‡ Includes agricultural, medical, and biological sciences.

SOURCE: NATIONAL RESEARCH COUNCIL

New Books on Higher Education

It may be necessary to add state tax to the cost of books listed below. Discounts may be available to scholars and to people who order in bulk.

Academic Excellence Versus Public Service: The Development of Adult Higher Education in California, by Kathleen Rockhill (Transaction Books, Rutgers University, New Brunswick, N.J. 08903; 320 pages; $24.95 prepaid). A history of the 100-year-old Extension Service of the University of California.

Adviser's Manual of Federal Regulations Affecting Foreign Students and Scholars, revised edition (Publications Order Desk, National Association for Foreign Student Affairs, 1860 19th Street, N.W., Washington 20009; 134 pages; $5). For college and university admissions officers and advisers to foreign students.

Applying Methods and Techniques of Futures Research (New Directions for Institutional Research #39), edited by James L. Morrison, William L. Renfro, and Wayne I. Boucher (Jossey-Bass Publishers, 433 California Street, San Francisco 94104; 110 pages; $7.95 prepaid). A collection of essays on how to assess social change and examine its implications for higher education.

Don't Miss Out: The Ambitious Student's Guide to Scholarships and Loans, 1984-85, by Robert Leider (Octameron Press, P.O. Box 3437, Alexandria, Va. 22302; 64 pages; $2.75). Octameron Press also publishes the following financial-aid guides for 1984-85; no shipping charge on a prepaid order: *The A's and B's of Academic Scholarships*, by Robert Leider and Shelly Schwab (64 pages; $2.75). *College Grants from Uncle Sam* (24 pages; $1.50). *College Loans from Uncle Sam* (24 pages; $1.50). *Earn and Learn: Cooperative Education Opportunities Offered by the Federal Government* (24 pages; $1.50).

The Holy Cross 100 Books (Office of the Dean, College of the Holy Cross, Worcester, Mass. 01610; 121 pages; limited number of free copies available). A collection of brief comments that Holy Cross faculty members have written about books especially important to them.

The Insider's Guide to the Top Ten Business Schools, edited by Tom Fischgrund (Little, Brown & Co., 34 Beacon Street, Boston 02106; 276 pages; $17.95 hardcover, $8.95 paperback, prepaid). Descriptions of business schools at Columbia University, Dartmouth College, Harvard University, Massachusetts Institute of Technology, Northwestern University, Stanford University, the University of California at Los Angeles, the University of Chicago, the University of Michigan, and the University of Pennsylvania.

Recruiting, Marketing, and Retention in Institutions of Higher Education, by Bob W. Miller and others (University Press of America: 351 pages; $13.25, plus $1.05 for shipping). Discusses methods of attracting and retaining students.

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CHRONICLE SURVEY

Faculty and Administrative-Staff Sizes Compared by Type of Institution, 1981-82 Academic Year

	PUBLIC INSTITUTIONS			PRIVATE INSTITUTIONS			
	Research Universities	Comprehensive Colleges*	All†	Research Universities	Comprehensive Colleges*	All†	All Institutions†
No. of administrators per 10 faculty members:							
At least 10	0.0%	0.0%	0.0%	0.0%	0.0%	2.8%	1.4%
At least 5 but fewer than 10	0.0%	0.0%	4.3%	0.0%	36.4%	46.5%	25.8%
At least 2.5 but fewer than 5	45.5%	37.5%	20.4%	66.7%	45.5%	35.0%	27.8%
Fewer than 2.5	54.5%	62.5%	75.3%	33.3%	18.2%	15.8%	45.0%
No. of clerical workers per 10 faculty members:							
At least 10	8.3%	0.0%	1.2%	0.0%	0.0%	2.5%	1.8%
At least 5 but fewer than 10	75.0%	25.0%	26.6%	100%	54.6%	67.3%	46.3%
At least 2.5 but fewer than 5	16.7%	68.7%	52.7%	0.0%	45.5%	26.2%	39.9%
Fewer than 2.5	0.0%	6.2%	19.5%	0.0%	0.0%	3.9%	12.0%
No. of technical personnel per 10 faculty members:							
At least 10	12.5%	0.0%	1.9%	0.0%	7.7%	5.8%	3.8%
At least 5 but fewer than 10	0.0%	0.0%	0.0%	50.0%	30.8%	23.8%	11.4%
At least 2.5 but fewer than 5	62.5%	33.3%	29.9%	33.3%	23.1%	44.0%	36.7%
Fewer than 2.5	25.0%	66.7%	68.1%	16.7%	38.5%	26.4%	48.1%
No. of other support personnel per 10 faculty members:							
At least 10	18.2%	0.0%	3.8%	0.0%	0.0%	1.8%	2.7%
At least 5 but fewer than 10	18.2%	23.1%	21.6%	40.0%	43.8%	43.5%	33.0%
At least 2.5 but fewer than 5	36.4%	53.8%	27.7%	20.0%	18.8%	30.0%	28.9%
Fewer than 2.5	27.3%	23.1%	46.9%	40.0%	37.5%	24.7%	35.3%

* Institutions with more than 1,500 students, a liberal-arts program, and at least one professional program.

† Includes two-year colleges.

Note: Figures represent full-time equivalents. Survey data are based on responses from a stratified random sample of 100 public and 100 private colleges and universities. Institutions with enrollments under 500 are excluded. Technical inquiries about the survey design and sampling techniques should be addressed to John Minter Associates, P.O. Box 107, Boulder, Colo. 80306.

SOURCE: SURVEY FOR THE CHRONICLE BY JOHN MINTER ASSOCIATES

Eastern Michigan University
conference on
Foreign Languages for Business and the Professions
Hyatt Regency Hotel • Dearborn, Michigan
April 5-7, 1984

Keynote Speakers: *Sven Groennings* (Director, Fund for the Improvement of Postsecondary Education—FIPSE)
René Zentner (Associate Dean, University of Houston Law Center, formerly Advisor for Issues Analysis at Shell Oil Company)

CALL FOR PAPERS

GENERAL AREAS TO BE COVERED AT THE CONFERENCE:

BUSINESS: Papers on any foreign language for business are appropriate, but preference will be given to commercial FRENCH, GERMAN, SPANISH, and to commercial ENGLISH for foreign students.

PROFESSIONS: Papers on any foreign language for any profession are appropriate, but preference will be given to papers on French, German, Spanish or ESL for the following: ENGINEERING, the SCIENCES and TECHNOLOGY, LAW (police, lawyers, the courts), MEDICINE (doctors, nurses, dentists, pharmacists), SOCIAL WORK, FIRE FIGHTING, PUBLIC EDUCATION (administrators, teacher's aides, secretaries, counselors), MATHEMATICS and JOURNALISM.

English will be the language of discourse for all conference papers and sessions.

SPECIFIC TOPICS TO BE COVERED AT THE CONFERENCE:

The conference program will accommodate presentations between 10 and 45 minutes in length. Proposals must relate to one of the two areas defined above (BUSINESS or the PROFESSIONS). Priority will be given to clearly-focused papers dealing with one or more of the following specific topics:

- Rationale for programs in foreign languages for special purposes.
- Documented evidence of the need for business people and/or professionals with foreign language experience.
- Descriptions of existing courses on languages for business or the professions (e.g., course level, contents, texts and materials used, etc.).
- Explanations of existing programs on langauges for business or the professions (entrance and degree requirements; course levels, sequences and descriptions; other program components).
- Specific suggestions, based on experience, on how to plan, fund and implement new courses and/or programs of these types.
- Techniques, methods, texts and/or materials for teaching foreign languages for business or the professions.
- Internship programs in foreign languages for special purposes.
- Relationship of special-purpose language courses to traditional offerings in languages and literatures, in business and/or in the professions.
- Study of foreign cultures in language courses for special purposes.
- Proficiency testing in foreign languages for business or the professions.
- Strategies for retraining language educators to teach commercial and/or professional aspects of foreign languages and cultures.
- Strategies for establishing professional acceptance in academia for practical foreign-language courses and programs.
- Impact on public school education of these new college level programs.

ABSTRACT REQUIREMENTS *(eight copies must be submitted):*

Date Due: November 4, 1983. Late abstracts will not be considered.
Format: Limited to one 8-1/2" X 11" page. Include on this page the title, length of presentation (in minutes), primary audience, and a summary of the contents of the proposed paper.
Audience: Indicate that your paper is appropriate for a general audience of language educators or, if language specific, state the language to which it applies. Also, if your paper deals with the professions, state exactly which profession(s) it will cover.
Author: Your name should appear ONLY on a separate page or card.

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Mailing address: Dr. Geoffrey M. Voght, Associate Professor of Spanish, Department of Foreign Languages and Bilingual Studies, Eastern Michigan University, Ypsilanti, MI 48197. (313) 487-0130/0178.

Administrators

Continued from Page 21

technical-and-trade, and other support personnel—by a ratio of at least 4 to 1.

Nearly three-fourths of the public institutions, but only about 15 per cent of the private institutions, reported having at least four faculty members for every administrator that year. At the great majority of private institutions, there were an average of one to three faculty slots for every administrative post.

Need for Service Personnel

One reason for the disparity between numbers of administrators at public and private institutions, says Thomas A. Emmet, special assistant to the president of Regis College, is that most private colleges are residential and require more staff members to manage housing and dining services and facilities.

Mr. Wulf predicts that greater reliance on computers will probably cause an increase in the the number of technical and professional staff members who can "manage and massage" both computer equipment and data.

The Chronicle's survey was conducted by John Minter Associates and was based on a stratified random sample. Information was provided by college and university personnel directors.

Rebuilding Under Way

Other survey data collected recently for *The Chronicle* have suggested that many colleges and universities are beginning to rebuild their staffs. In 1982-83, for example, about 30 per cent of institutions surveyed increased the number of faculty positions they had, while 18 per cent increased the number of their administrative positions.

In addition, officials at about a third of the colleges said they expected to increase the size of their faculties this academic year, and about half as many said they thought they would be adding administrators.

—STACY E. PALMER

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CHRONICLE
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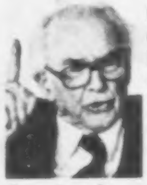
News Summary

Articles on inside pages



The father of the modern digital computer is being honored by Iowa State University this week, but John Vincent Atanasoff remains a footnote in history because the university neglected to patent his work. Story on Page 17.

Archivists are having problems documenting the Vietnam War that they have not encountered in their study of previous wars. Story on Page 5.

Natalie Davis of Princeton, an expert on early modern France and the author of *The Return of Martin Guerre*, helped provide historical authenticity to the French film of the same name. Story on Page 7.

The Education Department has accepted revised college-desegregation plans from Georgia and Oklahoma. Story on Page 23.

Teaching courses for experienced professionals is much tougher than teaching traditional adult-education courses, many professors are learning. Story on Page 25.

Joint efforts by colleges and the U.S. Field Hockey Association to put together a strong team for the Olympics may have long-term benefits for the sport. Story on Page 29.

State universities in Argentina were shut down for two days while 45,000 nonacademic employees went on strike. Story on Page 33.

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Bell Condemns 'Careerism' in Colleges

Emphasis on jobs seen causing decline in literacy

By MALCOLM G. SCULLY

TORONTO

Pressures for "job-related education" could lead to a crisis in American higher education as serious as the one afflicting elementary and secondary schools, Secretary of Education Terrel H. Bell warned here last week.

Speaking at a joint conference of the American Council on Education and the Association of Universities and Colleges of Canada, Mr. Bell condemned "pragmatic vocationalism and careerism" in higher education. Some colleges are in danger of becoming little more than "glorified work-preparation institutes," he said.

The National Commission on Excellence in Education concluded that American schools had drifted away from their central educational purposes, Mr. Bell said. "We may be witnessing a similar drifting away from the prime purpose of higher education. We ought to be examining whether we have distorted the priorities of our colleges and universities."

He said he was "concerned about the trend toward earlier and ever earlier entry of college students into job-related specialization," often at the expense of courses in the arts and humanities.

"We must beware of the crowding out of student time for the liberal arts because of the professional schools' propensity to demand more and more time of students," he said.

Mr. Bell accused some institutions of having a "virtual obsession with turning out what Walter Lippmann called 'efficient careerists.' " The concern with job-related education, he said, "might well lead to a decline in literacy, general civility, and in-

Continued on Page 21, Column 1

The Old Gray 'Ag' School Ain't What It Used to Be

By LAWRENCE BIEMILLER

LINCOLN, NEB.

Ron Geis grew up thinking that all kids got up each morning at 5 to help milk the cows. That was how it worked on his family's farm in Seward County in southeastern Nebraska—the six kids were always out of bed early, doing chores. When he was old enough to attend school over in the county seat, he says, he was surprised to learn that his classmates who lived in town slept until 7 or even 7:30.

He began then to understand that life is a little different for those who make their living from the land.

"The land" in his case is a 560-acre farm just up the road from a small town called Goehner, which is about 25 miles due west of Lincoln. Ron Geis's father, Carl, farms it now, but the land has been in the family since Ron's great-grandfather moved here in the nineteenth century. Like most farmers in this part of the state, Carl Geis grows mainly corn. He also raises pigs—Ron says his father first bought swine after some pigs Ron had raised as part of a 4-H project sold especially well—and some cattle, although he gave up his dairy herd a few years back when the kids started going off to get married, join the Army, or—in Ron's case—attend college.

Ron Geis is a senior in the University of Nebraska's College of Agriculture here in Lincoln. Like many of his classmates, he hopes to get a job in an agriculture-related industry after graduation, and to stay with the job for five years or so. After that, he says, after he's had some time to make a little money and to travel a bit, he expects to do something that fewer and fewer agriculture students can do these days—go back to Seward County to farm his family's land.

•

Even in Nebraska, where more than 90 per cent of the state's 49,949,000 acres are used as either cropland or pasture, fewer than a quarter of the university's agriculture graduates end up in what people here call "production"—which in Nebraska means farming.

"A lot of our students would *like* to go into farming, but they can't afford it," says Marialice Renard, who serves

Continued on Page 18, Column 1

Fees for Interlibrary Loans Spread; Scholars Fear Work Will Suffer

One in three research libraries now charges for service

By JACK MAGARRELL

More and more university libraries are charging fees for interlibrary loans.

The proportion of research libraries that charge fees for interlibrary loans has more than doubled in six years, from 15 per cent in 1976 to 33 per cent in 1982. Some scholars, especially those at small colleges, accustomed to obtaining books without charge through such loans, are concerned that the charges may become an impediment to research.

Brown University is one of the institutions that ended its free book loans this fall. Merrily E. Taylor, the university librarian, said Brown was, in effect, asking other libraries that may have avoided the cost of buying a book to share Brown's cost of lending it to them.

The fee for an interlibrary loan from Brown, starting last month, is $7. Unlike some libraries, Brown's does not charge a search fee for loan requests it cannot fill.

The reasons reported by Ms. Taylor for

Continued on Page 16, Column 1

Role of 'Intellectual Left' in Politics Stormily Debated in Socialist France

Bu DAVID DICKSON

PARIS

A stormy debate over the role of intellectuals in political affairs has been set off in France by accusations that many academics and writers who helped to bring President François Mitterrand to power two years ago have refused to support the government's programs.

The strongest criticisms came from Max Gallo, the chief press spokesman for the government, in a front-page article in *Le Monde* entitled "The Silence of the Intellectuals." He charged that there had been a "crumbling" of the intellectual left in France.

Many of the intellectuals who for 30 years provided support to the Socialist Party now refuse to come to its aid, Mr. Gallo said.

The article brought a flood of protests to the newspaper.

Some said the criticisms were unjust because many intellectuals who supported the government were quietly helping to implement its policies. Others argued that, given the nature of modern politics, it was inevitable that a gap develop between the government and its intellectual supporters.

The intensity of the response revealed that Mr. Gallo had touched a sensitive nerve among academics and intellectuals, who are already smarting under criticism

Continued on Page 34, Column 1

Presidents Alter Plan to Control NCAA

The American Council on Education's panel of college presidents has modified its plan to give campus chief executives effective control of the National Collegiate Athletic Association. Story on Page 29.

MARGINALIA

"If I'm looking for a comptroller, I want to know that a person has successfully managed 'x' amount of money and saved 'x' dollars," says Ms. White."—*The Chronicle*

"Sounds like she's looking for someone with experience in administrative suicide," writes Howard Stein of Grand Valley State Colleges.

■

A legend on the campus map in the 1983-84 catalogue of Winona State College assures us:

"All buildings are excessible by ramps and elevators for handicapped."

■

From *Comparative Government*, by Karl W. Deutsch, *et al.* (Houghton-Mifflin):

"In the generation in which 500 million people have become independent from British rule, the average Englishman has grown one inch taller than his father."

It's from not having to carry the white man's burden.

■

News release from Walla Walla College:

"Two faculty members from Walla Malla [*sic*] College's mathematics department presented papers at the International Congress of Mathematicians at Warsaw, Poland. . . .

"This congress was originally scheduled for 1982, but was delayed one year due to Polish Marshal Law."

He never did like mathematicians.

■

Picture caption in a newsletter published by the American Association for Affirmative Action:

PETER DE HAAN
Candidate for Treasurer
Peter has served our Association as Treasurer with diligence and dignity. It is to his credit and ours that he runs for the position unapproved.

■

From the *Official Bulletin and Calendar* of North Carolina State University:

"With respect to beverages containing more than 14 percentum of alcohol by volume (spirituous liquors) University policy permits, consistant [*sic*] with State Law, the possession and consumption of such beverages in private rooms of sufficient legal age (21)."

■

From the *Policy and Procedures Manual* of North Dakota State University:

"As soon as possible after the end of a month in which a staff member incurs reimbursable expenses, he should submit a completed travel voucher with the required receipts attached to his department head."

With tape or staples? —C.G.

In Brief

Reactor Called Unsafe at Licensing Hearing

A 100-kilowatt nuclear reactor at the University of California at Los Angeles is unsafe and should be replaced or modified, two physicists told a U.S. Atomic Safety and Licensing Board hearing in Los Angeles last week.

An accident could release toxic quantities of Iodine 131, which causes thyroid cancer, and could contaminate areas up to 50 miles from the campus, said Michio Kaku, an associate professor of theoretical physics at the City University of New York. Boyd Norton, a nuclear-safety expert, testified that the reactor was vulnerable to earthquakes, fires, and terrorist attacks.

University officials, who are seeking a new 20-year license to use the reactor for research and for experiments by students, testified earlier that it had run safely for 23 years and posed no danger to the campus or community.

U. of Kentucky Is Omitted from Guide at Own Request

At its own request, the University of Kentucky has been left out of the most recent edition of the *Selective Guide to Colleges*, edited by Edward B. Fiske of the New York *Times*.

The first edition of the guide characterized Kentucky as a party school for the student who "wants a college education without working too hard to get it."

In the introduction to that edition, Mr. Fiske said its articles had been based on answers to questionnaires distributed to students and administrators. Kentucky officials said they had never distributed those questionnaires.

According to Ray R. Hornback, vice-president for university relations, a lawyer for the university subsequently wrote the publisher, requesting that the university not be included in any future editions of the guide "for the obvious reason that we were not pleased with their slipshod methods."

Court Is Asked to Invalidate Arbitrator's Ruling in Mass.

The board of trustees of the University of Massachusetts has asked a court to overturn an arbitrator's decision requiring the institution to rehire a faculty member who was denied tenure and dismissed last year.

The administration contended that Anne Mochon, an assistant professor of art history on the Amherst campus, had been denied tenure because she was deficient in "research, creative, or professional activity," although she had the unanimous support of faculty colleagues within the department and a tenure committee.

The Massachusetts Society of Professors, the affiliate of the National Education Association that has represented Ms. Mochon, maintained that the administration had not given proper consideration to outside evaluations of Ms. Mochon's work or indicated where it was inadequate.

In binding arbitration, the university was instructed to reinstate Ms. Mochon with one year's back pay and to re-evaluate her.

Howard U. Agrees to Settle Suit Filed by Former Lawyer

Howard University has settled out of court with a former university lawyer who claimed he was a victim of sex discrimination.

The amount of the university's payment to Michael A. Harris was not disclosed. As part of the settlement, Mr. Harris agreed to drop the complaint he lodged with the U.S. Equal Employment Opportunity Commission almost a year ago.

In his complaint, Mr. Harris said that women in the university's office of the general counsel had received preferential treatment in pay and in promotions.

His complaint led to his dismissal last January and touched off a controvery when the editor of the student newspaper, Janice McKnight, was expelled from Howard after writing about the case. She was later reinstated.

The university declined to comment on the settlement.

Students Charged in Death of Laboratory Animal

Two University of Connecticut students were arrested last week and charged with abducting and killing an dog whose death could jeopardize a $340,000 research project.

The dog was the offspring of three generations of crossbreeding between coyotes and beagles. The animal was part of a genetic experiment being conducted by researchers in the department of biobehavioral sciences.

Steven S. McEnerney and David G. Pervier, both sophomores, were arrested by university police at their dormitory. Mr. McEnerney was charged with criminal trespassing, larceny, cruelty to animals, and unlawful killing of a dog. Mr. Pervier was charged as an accessory. They were to appear in court this week.

If found guilty, they also would be subject to discipline under the university's student code of conduct.

15 Pct. of Male Students Raped Women, Study Finds

Fifteen per cent of the male college students questioned in a survey said they had forced women to have sexual intercourse with them.

Barry R. Burkhart, an associate professor of psychology at Auburn University, and Karen Rapaport, his graduate assistant, interviewed 201 Auburn students for the survey. Mr. Burkhart said that those who admitted they had forced themselves on women were characteristically "more irresponsible and showed low degrees of empathy."

He added that the men thought it was legitimate to use aggression in sexual encounters.

In cases where men force themselves on women, Mr. Burkhart said, the attacks often go unreported because the women somehow feel responsible for the assault. In an earlier survey that he conducted, Mr. Burkhart said, over 20 per cent of the university women interviewed said men had forced them to have sex.

N.Y. Election Official Tells Students to Vote at Home

Students living at the State University of New York College at Purchase may not use their campus addresses to register to vote because a dormitory is not a permanent residence, a local election commissioner has ruled.

Antonia R. D'Apice, a member of the Westchester County Board of Elections, made the decision after about 500 of the 1,600 students who live on the campus submitted applications to register locally instead of in their hometowns.

Under New York State election law, individual county boards make decisions about new voter registrations. Students attending the state university at Binghamton and the College at Plattsburgh may register and vote locally.

Hopkins Sues Professor to Recover Medical Fees

The Johns Hopkins University is suing a former medical professor who, according to the university's charges, collected for himself more than $156,000 in fees for professional services that should have gone to the institution.

In the suit, the university claims that Harold H. Newball, a former associate professor of medicine, used university offices, equipment, and supplies to treat patients without telling the institution, and billed patients on his personal letterhead. The suit points out that the university does not allow faculty members to charge fees for professional services and that the physician's contract did not allow him to maintain a private practice.

The university and its insurance agency are seeking to recover the amount of the fees and other costs. No date has been set for a hearing.

Stanford Urged to Postpone Decision on Reagan Library

A Stanford University committee has recommended that the university delay until after the 1984 election its decision on whether to allow Ronald Reagan's Presidential library to be located on its campus.

If the decision is not put off until after the election—and if Mr. Reagan chooses to run—any university action could be viewed as political, the committee concluded. The committee's members were appointed by Donald Kennedy, Stanford's president.

Colby's Faculty Votes to Abolish Fraternities

Declaring that fraternities and sororities have a "negative impact" on the educational and residential life of the college, the Colby College faculty has voted 76 to 26 in favor of banning them from the campus.

The faculty's resolution was directed to a trustee committee that is studying campus life. The trust-

Illinois Energy Costs Rise 126 Pct.

SPRINGFIELD, ILL.

The escalation of colleges' energy costs during the past six years was illustrated in an analysis reported this month by the Illinois Board of Higher Education.

The report showed that the average price paid for natural gas by public universities and community colleges in Illinois had risen 163 per cent between fiscal 1977 and fiscal 1983.

Since the institutions have no influence on energy prices, the only ways they can limit the impact of rising utility rates are by conserving energy and converting to lower-priced fuels, the report said.

Even though natural gas was the energy source with the greatest increase in cost, its use at the Illinois institutions increased during the six years, from 31 per cent of their total energy consumption in 1977 to 55 per cent in 1983.

The price of electricity, the most expensive form of energy used by the institutions, rose 119 per cent in the six years.

The average price paid for electricity, per one million British thermal units, went up from $6.92 in 1977 to $15.15 in 1983. In the same period the average cost per million units of natural-gas energy rose from $1.77 to $4.66.

The average cost of all energy consumed by the Illinois institutions increased by 126 per cent, from $3.06 in fiscal 1977 to $6.92 in fiscal 1983.

—J.M.

	Proportion of total units* consumed		Average cost per million units*		
	1977	1983	1977	1983	Change
Natural gas ..	31.1%	55.5%	$1.77	$ 4.66	163.3%
Electricity	21.2%	23.4%	6.92	15.15	118.9%
Fuel Oil	33.0%	4.0%	2.35	4.62	96.6%
Coal	10.6%	11.5%	1.07	1.48	38.3%
Propane gas .	0.1%	0.1%	3.24	7.70	137.7%
Steam.........	4.0%	5.5%	3.86	7.85	103.4%
All sources ..	**100.0%**	**100.0%**	**$3.06**	**$6.92**	**126.1%**

* British thermal units

SOURCE: ILLINOIS BOARD OF HIGHER EDUCATION

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News Summary

Articles on inside pages

Troubled relations between the National Archives and the General Services Administration are adding momentum to the drive to make the Archives an independent agency. Story on Page 7.

Four American professors have won the 1983 Nobel Prizes in economics, chemistry, and physics. Story on Page 7.

A study of Soviet society by American and Israeli scholars has been dismissed as espionage by the Soviet Union. Story on Page 12.

A Presidential directive requiring government review of written work by anyone with access to highly classified data would have a "chilling" effect on research, scholars say. Story on Page 17.

Congress has passed and sent to the White House a compromise bill that would boost spending for Pell Grants by 16 per cent in 1984-85. Story on Page 17.

Layoffs for financial reasons have hit some 4,000 faculty members at U.S. colleges in the last five years. Story on Page 21.

A retired professor has been blocked by an appeals court in his attempt to obtain his pension benefits in a lump sum. Story on Page 21.

Soviet-bloc ministers of higher education last week expressed concern at the quality of instruction in Communist ideology in their countries. Story on Page 27.

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1,500 RETURNS EXAMINED

U.S. Finds Foundations Failing to Comply with Disclosure Law

By **JACK MAGARRELL**

WASHINGTON

With few exceptions, private foundations are failing to disclose fully the information required by federal law and needed by grant seekers, the General Accounting Office reports.

The G.A.O., the investigating agency of Congress, examined more than 1,500 tax returns in a random sample of reports filed with the Internal Revenue Service. It found the information incomplete and I.R.S. enforcement inadequate.

"Most foundations do not make full information disclosures on their returns," the G.A.O. said. "To assure that the public's information needs for oversight and grant-seeking purposes are met, I.R.S. needs to make administrative changes to better enforce those tax-exemption reporting requirements."

The I.R.S. has told the G.A.O. that it supports the report's recommendations and already has taken steps to improve compliance and strengthen enforcement of disclosure requirements.

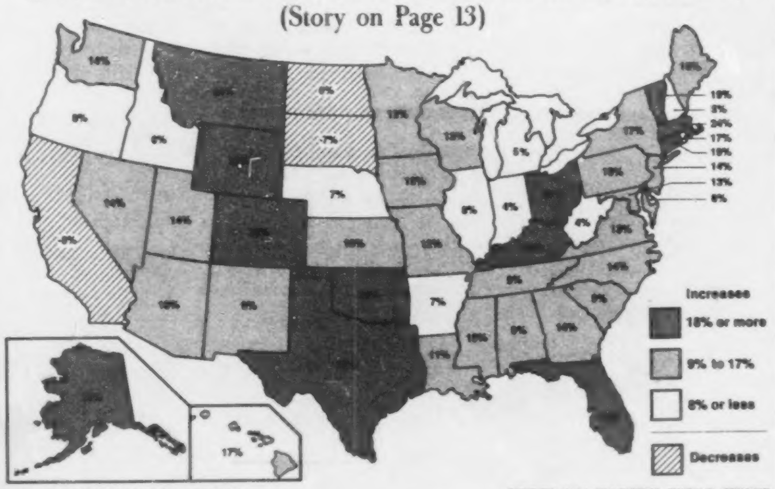
The G.A.O.'s examination of the tax returns submitted by foundations during a 14-month period ending last November found that only 6 per cent had reported all the required public-disclosure information.

The I.R.S. has been successful in getting 98 per cent of the foundations to comply with requirements that they disclose financial information needed for tax collection. But it has not given equal emphasis to information needed by the public, the G.A.O. said.

The G.A.O. said the success of the I.R.S. in obtaining compliance with the disclosure requirements needed for tax purposes indicated that with comparable efforts it

Continued on Page 20, Column 1

2-YEAR CHANGE IN STATE AID FOR COLLEGES
(Story on Page 13)



CHRONICLE MAP BY PETER H. STAFFORD

SOURCE: M.M. CHAMBERS, OWEN B. PRUYNE

Allegations of Lesbianism Being Used to Intimidate, Female Academics Say

By **CHERYL M. FIELDS**

Allegations of lesbianism and questions about women's sexual preferences have evidently been used on college and university campuses to intimidate female students and faculty members.

Although the allegations may not be true, many women on campuses say they are afraid that even discussing them will stigmatize them and hurt their careers and personal lives.

Other female academics say that although they have not experienced rumors or intimidation, they have been angered because they have been asked, by members of search committees, if they know why other female job candidates are single.

Female coaches and athletic administrators say they are particularly vulnerable to questions about their sexual orientation.

Some researchers even feel that because of the sensitivity of the issue, they may be hurt merely by studying homosexuality.

Several scholarly associations have

Continued on Page 22, Column 1

GM Pact on Bias Offers Millions in Scholarships

5-year plan will aid women and minorities

By **CHARLES S. FARRELL**

WASHINGTON

In an out-of-court settlement of discrimination charges, the General Motors Corporation promised last week to spend $15-million over the next five years on college scholarships for women and members of minority groups.

Clarence Thomas, chairman of the U. S. Equal Employment Opportunity Commission, said it would be wise for other companies to assess the G.M. agreement, because it could act as a precedent for future settlements.

Altogether the settlement totaled $42.5-million. It was agreed to by the Equal Employment Opportunity Commission, General Motors, and the United Automobile Workers, and ended 10 years of negotiations. About 700 G.M. employees had charged that the automaker discriminated in hiring, training, and promotion.

The settlement was the largest in the history of the E.E.O.C., the federal agency that enforces Title VII of the Civil Rights Act of 1964. That law prohibits job discrimination on the basis of race, color, religion, national origin, or sex.

Technical Fields Emphasized

The main objective of the educational-assistance program is to increase the number of minority-group members and women in engineering and other technical fields, although the program is not limited to those areas. The E.E.O.C.'s Mr. Thomas cited the small number of such people who are being educated in technical fields and said the education program in the agreement was designed to help eliminate those disparities.

"Even though all signs point to continued recovery from our latest recession," he said, "many jobs which were lost during recent hard times are not being replaced. Many companies have retooled in order to profit in the new information age. The people who are destined to succeed in this new era are the people who are also retooling, developing the high-tech knowledge they will need to keep pace."

William P. MacKinnon, vice-president

Continued on Page 18, Column 1

In the Athletics Section

Supreme Court to Weigh TV Football Contracts

The Supreme Court has agreed to review lower-court rulings that would strip the National Collegiate Athletic Association of its control of the televising of football games. See Page 26.

Why Would a Campus Want the Olympics?

To make money, answers one official flatly. Nine colleges are providing sites for events in next year's Olympic Games, and three campuses will serve as "Olympic villages." See Page 25.

BEST AVAILABLE COPY

States' Support for Colleges Up 12 Pct. in 2 Years

1983-84 appropriations total $25.4-billion

By **BEVERLY T. WATKINS**

Although many states are still experiencing financial difficulties, the vast majority are continuing to provide at least a modest increase in their support for higher education.

Together, the 50 state legislatures have appropriated a total of $25.4-billion for the operating expenses of colleges and universities this year, an increase of about 5 per cent over 1982-83 and a gain of about 12 per cent over a two-year period.

Although the increase is the smallest since 1960, "the main point is that it is a gain," said M. M. Chambers, professor of education administration at Illinois State University, who has compiled comparable data from the states every year for the last 25 years.

While the gain "may be said to be moderate, it is substantially more than the rate of general inflation current during the period," he pointed out.

Increases over 20 Pct.

Some states have provided sizable increases in support for higher education in the past two years. In Massachusetts and Montana, for example, appropriations in that period were up by 24 per cent. In Alaska the increase was 23 per cent, in Wyoming 22 per cent, and in Connecticut 20 per cent.

Mr. Chambers said the increase in appropriations "provides something of an affirmative answer" to a question that has troubled educators for the last few years. With the Reagan Administration reducing federal funds and turning financial responsibilities back to the states, he said, many people have been asking if the legislatures will "step into the breach and continue to improve state support for higher education."

So far, Mr. Chambers concluded, the answer seems to be Yes. "In both 1981 and 1982 the 50 states levied higher increases in state taxes than in recent years, and the early months of the 1983 [legislative] sessions seemed to offer the prospect that this trend would continue," he said.

Decrease in California

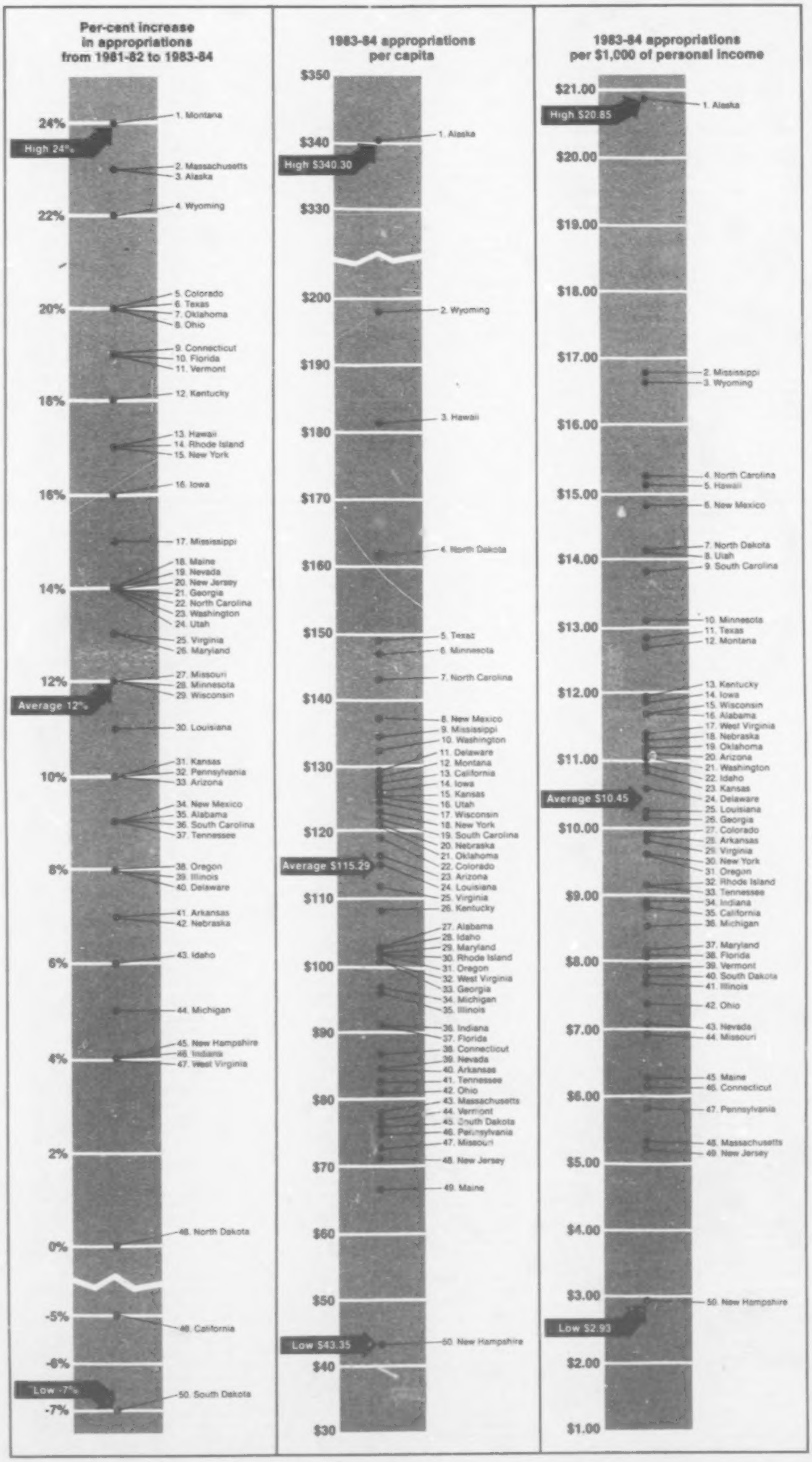
In California, which provides close to one-eighth of all state tax funds appropriated for higher education, the legislature decreased support this year by almost 4 per cent—to $3.1-billion—after what Mr. Chambers called a "long deadlock and disputation" between the legislators and the governor.

In Michigan and Illinois, which were hit hard by the economic recession, the legislatures were able to raise the rates of income taxes, as well as some other taxes; "at least temporarily," Mr. Chambers said, and they increased their appropriations for higher education this year.

When the 1983-84 appropriations are adjusted for the 9.8-per-cent inflation that has occurred in the last two years, the result is a decline in real support for higher education in 16 of the 50 states. Overall, inflation turns a two-year increase of 12 per cent into a gain of about 2 per cent.

The inflation rate, which is based on the

Continued on Page 16, Column 1



Per-cent increase in appropriations from 1981-82 to 1983-84

1983-84 appropriations per capita

1983-84 appropriations per $1,000 of personal income

CHRONICLE CHART BY PETER H. STAFFORD

SOURCE: M.M. CHAMBERS, ILLINOIS STATE UNIVERSITY

FACT–FILE

State Appropriations for Higher Education

The following data were compiled by M. M. Chambers of Illinois State University. The full report, including additional footnotes, will be available next month from the National Association of State Universities and Land-Grant Colleges, One Dupont Circle, Washington 20036. The price is $3.50 a copy for non-members.

Annual Appropriations

	Appropriations 1983-84 (add 000)	2-year change
ALABAMA		
U of Alabama		
Birmingham	$ 70,701	+11%
Tuscaloosa	46,983	+12%
Huntsville	13,687	+22%
Auburn U	72,407	+13%
U of South Alabama	26,112	+ 9%
Jacksonville St U	12,626	+ 8%
Alabama A&M U	10,077	+11%
Troy St U	9,975	+20%
Alabama St U	8,703	+11%
U of North Alabama	8,796	+18%
U of Montevallo	6,617	+ 9%
Livingston U	4,219	+16%
Athens St C	2,626	+34%
Community colleges	45,100	+ 9%
Aid to pvt insts	2,485	0%
Student aid	896	− 5%
Other appropriations*	68,629	n/c
Total	**$ 410,636**	**+ 9%**
ALASKA		
U of Alaska		
Fairbanks	$ 59,813	n/c
Anchorage	22,089	+24%
Juneau	9,475	+30%
Community colleges	41,286	+27%
Other appropriations	18,089	n/c
Total	**$ 150,752**	**+23%**
ARIZONA		
U of Arizona	$ 147,249	+ 4%
Arizona St U	102,551	+ 6%
Northern Arizona U	37,906	+ 9%
Community colleges	44,618	+47%
Other appropriations	3,756	+ 2%
Total	**$ 336,080**	**+10%**
ARKANSAS		
U of Arkansas	$ 123,424	+ 6%
Arkansas St U	19,741	+ 7%
U of Central Arkansas	13,371	+13%
Southern Arkansas U	8,231	+12%
Arkansas Tech U	7,491	+16%
Henderson St U	6,906	+ 6%
Community colleges	14,502	+ 8%
Student aid	2,166	n/c
Other appropriations	1,489	n/c
Total	**$ 197,321**	**+ 7%**
CALIFORNIA		
U of California	$ 1,106,235	− 2%
Cal St U & Colls	955,521	− 3%
Hastings C of Law	6,484	−14%
Cal Maritime Academy	3,677	+ 7%
Community colleges	995,188	−10%
Student aid	80,869	−11%
Postsecondary Ed Commission	2,402	− 8%
Total	**$ 3,150,376**	**− 5%**
COLORADO		
U of Colorado	$ 135,717	+33%
St Bd of Ag (for Colorado St U, U of Southern Colo, and Ft. Lewis C)	68,843	+15%
U of Northern Colo	20,919	− 3%
Colo Sch of Mines	8,896	+ 6%
State colleges (Mesa, Metropolitan, Western, and Adams St)	35,475	+15%
Aid to state comm colls	30,892	+16%
Aid to dist comm colls	10,004	+16%
Occupational ed	21,788	+ 9%
Student aid	21,330	+43%
Veterans' tuition aid	345	−49%
Other appropriations	3,439	n/c
Total	**$ 338,747**	**+20%**
CONNECTICUT		
U of Connecticut	$ 121,139	+12%
State colleges	54,714	+19%
Higher Ed Ctr	1,966	+41%
Aid to regional comm colleges	30,386	+21%
Aid to state tech colleges	10,496	+26%
Other appropriations*	52,011	n/c
Total	**$ 273,798**	**+18%**

n/c Not comparable
* Estimated
— Indicates change of less than 1 per cent

	Appropriations 1983-84 (add 000)	2-year change
DELAWARE		
U of Delaware	$ 45,664	n/c
Del Tech and Comm Coll	18,609	+ 7%
Delaware St C	11,440	+19%
Delaware Inst of Med Ed and Research	1,349	+ 4%
Delaware Inst Veterinary Med Ed	181	+10%
Other appropriations	529	+ 5%
Total	**$ 77,772**	**+ 8%**
FLORIDA		
U of Florida	$ 226,917	+19%
U of South Florida	100,131	+20%
Florida St U	60,441	+15%
Florida International U	38,601	+14%
U of Central Florida	38,745	+22%
Florida Atlantic U	28,447	+15%
Florida A&M U	23,900	+19%
U of West Florida	19,462	+ 6%
U of North Florida	14,819	+ 8%
U of Miami Medical Sch	8,411	+ 5%
U of Miami Nursing Program	286	+48%
U of Miami Electrical Engineering	473	n/c
Florida Inst of Tech	317	n/c
Barry C, Social Work	207	+ 1%
FIT Science Education	36	n/c
Community colleges	319,518	+14%
Student aid	20,701	n/c
Other appropriations	25,847	+77%
Total	**$ 958,258**	**+19%**
GEORGIA		
U of Georgia	$ 157,393	+14%
Medical C of Georgia	68,896	+10%
Georgia St U	58,151	+14%
Georgia Inst of Tech	47,435	+11%
State colleges		
Georgia Southern	15,296	+10%
West Georgia	12,644	+ 5%
Valdosta	10,570	+11%
Columbus	9,868	+ 9%
Fort Valley	7,814	+11%
Savannah	7,549	+10%
Georgia	7,105	+ 9%
Augusta	7,113	+ 9%
Albany	7,458	+19%
Kennesaw	6,428	+10%
Armstrong	6,512	+11%
Georgia Southwestern	6,284	+10%
Southern Tech Inst	5,839	+28%
North Georgia	4,911	+15%
Aid to st comm colls	42,374	+10%
Aid to Dekalb CC	6,577	+11%
Student aid	748	+ 5%
Other appropriations	73,225	n/c
Total	**$ 570,170**	**+14%**
HAWAII		
U of Hawaii	$ 162,108	+16%
Other appropriations*	41,581	n/c
Less tuition and other revenue	−22,129	
Total	**$ 181,560**	**+17%**
IDAHO		
U of Idaho	$ 41,079	+ 8%
Boise St U	20,747	+10%
Idaho St U	18,846	+ 3%
Lewis-Clark St C	3,059	+22%
Community colleges*	4,470	+ 3%
Student aid	267	+ 1%
Other appropriations	12,639	n/c
Total	**$ 101,107**	**+ 6%**
ILLINOIS		
U of Illinois		
Urbana-Champaign	$ 191,910	+12%
Health Sciences Center	112,960	+ 7%
Chicago-University Ctr	58,121	+ 4%
Central administration	27,292	+13%
Southern Illinois U	134,082	+ 3%
Northern Illinois U	62,983	+ 4%
Illinois St U	49,547	+ 5%
Western Illinois U	34,931	+ 8%
Eastern Illinois U	28,065	+10%
Northeastern Illinois U	20,870	0%
Chicago St U	18,210	− 1%
Sangamon St U	13,594	+ 2%
Governors St U	13,980	+ 2%
Community colleges	198,279	+ 3%
Student aid	104,094	+16%
Other appropriations*	78,169	n/c
Total	**$ 1,106,887**	**+ 8%**
INDIANA		
Indiana U	$ 202,416	+11%
Purdue U	138,186	+ 6%
Indiana St U	47,146	+10%
Ball St U	55,499	+16%
Indiana Voc-Tech C	23,041	+11%
Vincennes U	10,961	+29%
Student aid	22,576	+ 9%
Other appropriations	3,659	n/c
Total	**$ 503,484**	**+ 4%**

	Appropriations 1983-84 (add 000)	2-year change
IOWA		
U of Iowa	$ 129,526	n/c
Iowa St U	117,665	n/c
U of Northern Iowa	37,565	+15%
Des Moines C of Osteo	784	+74%
Aid to area schools	65,431	n/c
Student aid	20,189	+36%
Other appropriations	958	n/c
Total	**$ 372,128**	**+16%**
KANSAS		
U of Kansas	$ 127,674	+ 8%
Kansas St U	70,239	+12%
Wichita St U	30,212	+12%
Emporia St U	14,710	+ 4%
Pittsburg St U	14,288	+ 6%
Fort Hays St U	13,605	+10%
Washburn U of Topeka	3,788	+37%
Kansas Tech Inst	2,596	+33%
Community colleges	23,637	+18%
Other appropriations	5,764	− 4%
Total	**$ 306,473**	**+16%**
KENTUCKY		
U of Kentucky	$ 153,602	+22%
U of Louisville	82,142	+20%
Eastern Kentucky U	35,201	+17%
Western Kentucky U	33,756	+15%
Murray St U	25,914	+14%
Morehead St U	20,891	+15%
Northern Kentucky U	17,280	+17%
Kentucky St U	9,845	+ 5%
Other appropriations	11,989	n/c
Total	**$ 460,520**	**+18%**
LOUISIANA		
Louisiana St U	$ 278,654	+11%
Southern U	39,495	+18%
Bd of Trustees system		
U of SW Louisiana	32,351	+ 9%
Louisiana Tech U	25,090	+ 5%
NE Louisiana U	24,174	+ 7%
SE Louisiana U	18,230	+ 6%
Northwestern St U	16,861	+ 9%
Nicholls St U	15,902	+ 8%
McNeese St U	16,361	+32%
Grambling St U	13,181	+15%
Delgado CC	11,801	+ 5%
System administration	774	−15%
LA U Marine Consortium	589	+16%
Aid to pvt colleges	3,383	+11%
Student aid	2,149	−29%
Other appropriations	2,739	n/c
Total	**$ 500,086**	**+11%**
MAINE		
U of Maine	$ 60,237	+15%
Maine Maritime Acad	2,988	+ 2%
Vocational education	11,812	+19%
Student aid	1,616	+ 3%
Total	**$ 76,653**	**+16%**
MARYLAND		
U of Maryland	$ 188,490	+15%
State colleges		
Towson	20,125	+11%
Morgan	14,032	+ 7%
Frostburg	8,691	+13%
Salisbury	7,232	+11%
U of Baltimore	6,855	+16%
Bowie	6,274	+ 7%
Coppin	5,569	+12%
St Mary's C of Md	3,746	+11%
Trustees	6,536	−12%
Community colleges	66,369	+14%
Aid to pvt colleges	12,970	+16%
Student aid	9,003	− 2%
Other appropriations*	81,136	+15%
Total	**$ 437,028**	**+13%**
MASSACHUSETTS		
Institutions (Individual totals not available)	$ 411,434	n/c
Board of regents	2,500	n/c
Student aid	34,000	n/c
Other appropriations	3,489	n/c
Total	**$ 451,423**	**+24%**
MICHIGAN		
U of Michigan	$ 163,758	− 5%
Michigan St U	163,737	+ 7%
Wayne St U	112,046	+ 9%
Western Michigan U	51,776	+ 6%
Eastern Michigan U	38,918	+ 6%
Central Michigan U	33,578	+ 6%
Ferris St C	24,891	+ 6%
Michigan Tech U	24,200	+ 8%
Northern Michigan U	24,009	+ 8%
Oakland U	22,266	+ 6%
Grand Valley St C	14,883	+ 9%
Saginaw Valley St C	7,829	+ 8%
Lake Superior St C	6,529	+ 8%
Community colleges	144,708	+ 7%

	Appropriations 1983-84 (add 000)	2-year change
MICHIGAN—Continued		
Student aid	52,979	+ 7%
Other appropriations	1,364	n/c
Total	**$ 887,471**	**+ 8%**
MINNESOTA		
U of Minnesota	$ 294,045	+12%
State universities	103,819	+11%
Aid to area voc-tech insts	105,625	+11%
Aid to comm colleges	81,170	+13%
Mayo Medical School	1,344	− 4%
Student aid	53,937	+29%
Other appropriations	2,270	n/c
Total	**$ 612,209**	**+12%**
MISSISSIPPI		
U of Mississippi	$ 83,335	+12%
Mississippi St U	71,253	+15%
U of So Mississippi	35,750	+13%
Jackson St U	17,879	+15%
Delta St U	10,884	+ 9%
Miss U for Women	8,477	− 6%
Alcorn St U	9,002	+10%
Miss Valley State U	7,845	+ 3%
Gulf Coast Research Lab	2,998	+ 6%
Vocational education	41,876	+24%
Community colleges	47,076	+30%
Student aid	2,044	+30%
Other appropriations	7,361	n/c
Total	**$ 346,370**	**+15%**
MISSOURI		
U of Missouri	$ 183,021	+11%
SW Missouri St U	25,530	+16%
Central Missouri St U	19,943	+13%
SE Missouri St U	17,582	+14%
NE Missouri St U	13,962	+14%
NW Missouri St U	11,066	+17%
Missouri Western St C	7,458	+18%
Missouri Southern St C	6,562	+16%
Lincoln U	6,387	+15%
Harris-Stowe C	3,122	+18%
Aid to pub comm colls	39,560	+ 9%
Student aid	9,161	+24%
Other appropriations*	20,335	+13%
Total	**$ 363,689**	**+12%**
MONTANA		
Montana St U	$ 40,974	+23%
U of Montana	28,920	+17%
Eastern Montana C	10,374	+23%
Northern Montana C	5,691	+35%
Western Montana C	2,886	+26%
C of Min Sci & Tech	8,457	+48%
Community colleges	3,128	+26%
Student aid	4,396	+143%
Other appropriations	791	n/c
Total	**$ 105,617**	**+24%**
NEBRASKA		
U of Nebraska	$ 148,817	+ 6%
Kearney St C	9,373	+ 5%
Wayne St C	5,446	+10%
Chadron St C	5,137	+ 5%
Peru St C	2,956	+ 6%
System office	478	+171%
Aid to tech comm colls	21,595	+16%
Other appropriations	123	− 8%
Total	**$ 193,925**	**+ 7%**
NEVADA		
U of Nevada		
Reno	$ 33,216	+10%
Las Vegas	20,854	+19%
Community colleges	13,083	+14%
Student aid	25	n/c
Other appropriations	8,181	n/c
Total	**$ 75,360**	**+14%**
NEW HAMPSHIRE		
U of New Hampshire	$ 28,178	+ 4%
Keene St C	4,497	+10%
Plymouth St C	4,488	+16%
Merrimack Valley C	602	+96%
School for Lifelong Learning	364	+13%
Aid to tech colleges	6,786	+ 4%
Student aid	161	+33%
Total	**$ 41,141**	**+ 8%**
NEW JERSEY		
Rutgers U	$ 140,563	+19%
U of Medicine & Dentistry of N.J.	90,446	+20%
NJ Inst of Tech	18,511	+12%
State colleges		
Montclair	20,270	+ 8%
Paterson	19,007	+ 9%
Trenton	18,679	+12%
Kean	17,544	+11%
Glassboro	16,964	+12%
Jersey City	15,880	+11%
Richard Stockton	9,764	+15%
Ramapo	9,079	+14%

in 1983-84 and Changes over 2 Years

	Appropriations 1983-84 (add 000)	2-year change
NEW JERSEY—Continued		
Thomas A Edison St C	1,506	+37%
Aid to county colleges	58,188	+ 5%
Aid to pvt colleges	11,075	+ 2%
Student aid	59,581	+ 7%
Other appropriations	21,844	n/c
Total	$ 531,891	+14%
NEW MEXICO		
U of New Mexico	$ 87,615	+12%
New Mexico St U	55,312	+ 6%
E New Mexico U	17,662	+12%
NM Inst of Min & Tech	9,023	+10%
NM Highlands U	8,228	+ 9%
W New Mexico U	4,552	+13%
N New Mexico CC	3,068	+13%
San Juan CC	361	n/c
NM Junior C	403	+19%
Student aid	390	−25%
Other appropriations	986	n/c
Total	$ 187,600	+ 9%
NEW YORK		
SUNY centers		
Stony Brook	$ 184,469	+32%
Buffalo	141,635	+19%
Albany	70,028	+18%
Binghamton	46,883	+19%
SUNY medical ctrs	186,268	+33%
SUNY colleges		
Buffalo	35,769	+15%
Brockport	31,167	+13%
Oswego	28,463	+12%
New Paltz	23,891	+18%
Oneonta	23,813	+17%
Cortland	22,655	+22%
Plattsburgh	22,058	+17%
Potsdam	20,838	+17%
Fredonia	20,626	+26%
Geneseo	20,553	+14%
Purchase	17,278	+11%
Old Westbury	13,140	+25%
Statutory colleges		
Cornell U	79,151	+22%
Alfred U	4,714	+21%
Specialized colleges		
Environmental Science & Forestry	14,835	+15%
Empire State	10,632	+14%
Technology	8,619	+10%
Maritime	7,292	+12%
Optometry	8,199	+44%
Ag & tech colleges	83,120	+20%
University programs	79,937	n/c
Community colleges	195,801	+12%
Private colleges	128,343	+ 8%
Student aid	353,633	n/c
Other appropriations*	656,194	+37%
Less student fees and other income	−373,096	+85%
Total	$ 2,166,908	+17%
NORTH CAROLINA		
U of North Carolina		
Chapel Hill	$ 184,102	+10%
Greensboro	32,012	+11%
Charlotte	27,758	+18%
Wilmington	15,752	+21%
Asheville	7,230	+30%
North Carolina St U	140,062	+20%
East Carolina U	70,159	+23%
Appalachian St U	29,864	+12%
NC A&T St U	20,583	+ 8%
Western Carolina U	19,559	+ 6%
NC Central U	17,609	+10%
Winston-Salem St U	9,021	+11%
Fayetteville St U	8,457	+ 7%
Pembroke St U	7,372	+ 8%
Elizabeth City St U	6,941	+ 3%
NC Sch of the Arts	4,998	+ 9%
Community colleges and tech insts	220,787	+14%
Other appropriations	42,392	+13%
Total	$ 864,658	+14%
OHIO		
Ohio St U	$ 202,063	+14%
U of Cincinnati	89,452	+24%
Kent St U	44,706	+13%
U of Akron	47,231	+29%
Ohio U	42,891	+23%
Bowling Green St U	39,182	+14%
U of Toledo	38,502	+27%
Wright St U	37,739	+25%
Cleveland St U	36,463	+21%
Miami U	33,214	+13%
Youngstown St U	27,276	+17%
Medical C of Ohio	17,488	+17%
Northeastern Med C	8,820	+31%
Central St U	9,809	+18%
Case Western Res U	6,171	− 8%
Aid to comm colleges	55,809	+40%
Aid to tech colleges	52,012	+31%
U branches	30,016	+13%
Student aid	4,000	n/c
Other appropriations	60,917	n/c
Total	$ 883,761	+20%

	Appropriations 1983-84 (add 000)	2-year change
OKLAHOMA		
U of Oklahoma	$ 110,395	+16%
Oklahoma St U	103,061	+17%
Central St U	21,656	+20%
Northeastern St U	13,756	+17%
Southwestern St U	11,686	+13%
Cameron U	9,967	+17%
Southeastern St U	9,063	+19%
East Central St U	8,656	+18%
Okla C of Osteo Med	6,415	+30%
Langston U	4,627	+21%
Northwestern St U	4,128	+21%
Okla Panhandle St U	3,762	+16%
U of Science & Arts	3,684	+11%
Community colleges	67,297	+17%
Student aid	6,182	n/c
Other appropriations	4,832	n/c
Total	$ 389,167	+20%
OREGON		
Oregon St U	64,450	+17%
U of Oregon	$ 57,643	+17%
Health Sci Ctr	26,474	+16%
Portland St U	26,858	+23%
So Oregon St C	9,142	+13%
Western Oregon St C	8,143	+19%

	Appropriations 1983-84 (add 000)	2-year change
OREGON—Continued		
Oregon Inst of Tech	8,077	+25%
Eastern Oregon St C	5,327	+18%
Community colleges	50,593	− 2%
Student aid	8,497	− 1%
Other appropriations	7,765	n/c
Total	$ 272,969	+ 8%
PENNSYLVANIA		
Pennsylvania St U	$ 149,368	+10%
Temple U	90,594	+10%
U of Pittsburgh	81,444	+10%
Lincoln U	5,812	+44%
State-owned insts	235,053	+ 8%
Pvt, state-aided insts		
U of Pennsylvania	23,074	+ 6%
Thomas Jefferson U	6,260	+ 7%
Drexel U	4,242	+ 8%
Philadelphia C of Osteopathic Med	3,952	+10%
Hahnemann Med U	3,848	+10%
Med C of Pa	2,432	+ 9%
Pa C of Optometry	905	+ 6%
Pa C Podiatric Med	742	+ 6%
Philadelphia C of Art	461	0%

	Appropriations 1983-84 (add 000)	2-year change
PENNSYLVANIA—Continued		
Philadelphia C of Textiles & Science	405	0%
Del Valley Sci & Ag	307	0%
Philadelphia C of Performing Arts	107	0%
Community colleges*	53,877	+21%
Other appropriations*	238,740	n/c
Total	$ 902,253	+10%
RHODE ISLAND		
U of Rhode Island	$ 47,419	+14%
Rhode Island C	22,628	+16%
CC of Rhode Island	17,596	+17%
Student aid	7,759	+30%
Aid to medical ed	1,256	+ 8%
Other appropriations	2,249	n/c
Total	$ 97,651	+17%
SOUTH CAROLINA		
U of South Carolina	$ 107,296	+ 8%
Medical U of SC	74,121	+ 5%
Clemson U	72,646	+ 9%

Continued on Following Page

How the States Rank on 7 Scales

	1983-84 appropriations (a)		Appropriations per capita (b)		Approp. per $1,000 of personal income (c)		2-year change (d)		10-year change (e)		2-year change less inflation (f)		10-year change less inflation (g)	
	Amount	Rank	Amount	Rank	Amount	Rank	Per cent	Rank	Per cent	Rank	Per cent	Rank	Per cent	Rank
Alabama	$ 410,036,000	20	$103.91	27	$11.67	16	+ 9%	35	+147%	32	− 1%	35	+ 10%	32
Alaska	150,752,000	39	340.30	1	20.85	1	+23%	3	+544%	1	+12%	3	+186%	1
Arizona	336,080,000	29	116.25	23	11.09	20	+10%	33	+147%	31	0%	33	+ 10%	31
Arkansas	197,321,000	35	85.64	40	9.87	28	+ 7%	41	+169%	20	− 2%	41	+ 19%	20
California	3,150,376,000	1	128.19	13	8.83	35	− 5%	49	+172%	19	−14%	49	+ 21%	19
Colorado	366,747,000	26	119.69	22	9.90	27	+20%	5	+161%	23	+ 9%	6	+ 16%	23
Connecticut	273,706,000	31	87.17	38	6.15	46	+19%	9	+128%	37	+ 9%	10	+ 1%	37
Delaware	77,792,000	45	129.65	11	10.64	24	+ 8%	40	+132%	35	− 2%	40	+ 3%	35
Florida	956,258,000	5	91.66	37	8.06	38	+19%	10	+176%	18	+ 9%	11	+ 23%	18
Georgia	570,170,000	13	101.06	33	10.18	26	+14%	21	+161%	24	+ 4%	22	+ 16%	24
Hawaii	181,560,000	38	181.92	3	15.17	5	+17%	13	+217%	7	+ 7%	14	+ 41%	7
Idaho	101,007,000	42	103.60	28	10.94	22	+ 6%	43	+148%	30	− 3%	43	+ 10%	30
Illinois	1,106,007,000	4	96.58	35	7.73	41	+ 8%	39	+101%	46	− 2%	39	− 11%	46
Indiana	503,484,000	16	91.76	36	8.89	34	+ 4%	46	+116%	42	− 5%	46	− 4%	42
Iowa	372,128,000	25	127.75	14	11.88	14	+16%	16	+158%	25	+ 5%	17	+ 14%	25
Kansas	306,473,000	30	126.96	15	10.88	23	+10%	31	+181%	17	0%	32	+ 25%	17
Kentucky	400,529,000	21	108.60	26	11.97	13	+18%	12	+205%	10	+ 7%	13	+ 36%	10
Louisiana	503,086,000	17	115.04	24	10.26	25	+11%	30	+217%	8	+ 1%	30	+ 41%	8
Maine	76,653,000	46	67.48	49	6.29	45	+15%	18	+ 92%	49	+ 4%	19	− 15%	49
Maryland	437,028,000	19	102.37	29	8.14	37	+13%	26	+153%	29	+ 3%	27	+ 12%	29
Massachusetts	451,423,000	18	78.47	43	5.38	48	+24%	2	+155%	28	+13%	2	+ 13%	28
Michigan	887,471,000	7	97.35	34	8.54	36	+ 5%	44	+ 91%	50	− 5%	45	−15%	50
Minnesota	612,209,000	11	147.77	6	13.07	10	+12%	28	+165%	22	+ 2%	28	+ 18%	22
Mississippi	345,370,000	28	134.54	9	16.80	2	+15%	17	+206%	9	+ 5%	18	+ 36%	9
Missouri	363,689,000	27	73.49	47	6.98	44	+12%	27	+101%	45	+10%	5	− 11%	45
Montana	103,617,000	41	128.88	12	12.73	12	+24%	1	+182%	16	+13%	1	+ 25%	16
Nebraska	193,925,000	36	121.81	20	11.35	18	+ 7%	42	+185%	14	− 3%	42	+ 27%	14
Nevada	75,360,000	47	85.93	39	7.02	43	+14%	19	+183%	15	+ 4%	20	+ 26%	15
New Hampshire	41,141,000	49	43.35	50	2.93	50	+ 5%	45	+136%	34	− 5%	44	+ 5%	34
New Jersey	531,891,000	15	71.77	48	5.31	49	+14%	20	+106%	44	+ 4%	21	− 8%	44
New Mexico	187,600,000	37	137.23	8	14.83	6	+ 9%	34	+242%	6	0%	34	+ 52%	6
New York	2,166,908,000	3	123.74	18	9.66	30	+17%	15	+120%	40	+ 6%	16	− 2%	40
North Carolina	864,658,000	9	143.73	7	15.23	4	+14%	22	+201%	11	+ 4%	23	+ 34%	11
North Dakota	106,725,000	40	161.55	4	14.12	7	0%	48	+243%	5	− 9%	48	+ 52%	5
Ohio	883,761,000	8	81.91	42	7.41	42	+20%	8	+156%	27	+ 9%	9	+ 13%	27
Oklahoma	389,167,000	23	121.16	21	11.22	19	+20%	7	+305%	4	+ 9%	8	+ 80%	4
Oregon	272,969,000	32	102.12	31	9.61	31	+ 8%	38	+121%	39	− 2%	38	− 2%	39
Pennsylvania	902,253,000	6	75.91	46	5.83	47	+10%	32	+110%	43	0%	31	− 7%	43
Rhode Island	97,651,000	44	102.36	30	9.16	32	+17%	14	+130%	36	+ 6%	15	+ 2%	36
South Carolina	392,471,000	22	122.15	19	13.82	9	+ 9%	36	+166%	21	− 1%	36	+ 18%	21
South Dakota	53,070,000	48	76.14	45	7.81	40	− 7%	50	+ 97%	47	−15%	50	− 13%	47
Tennessee	387,738,000	24	83.33	41	9.14	33	+ 9%	37	+157%	26	− 1%	37	+ 14%	26
Texas	2,282,342,000	2	149.38	5	12.84	11	+20%	6	+356%	2	+ 9%	7	+103%	2
Utah	198,060,000	34	126.72	16	14.10	8	+14%	24	+198%	13	+ 4%	25	+ 33%	13
Vermont	40,343,000	50	77.88	44	7.92	39	+19%	11	+119%	41	+ 8%	12	− 3%	41
Virginia	617,283,000	10	112.66	25	9.84	29	+13%	25	+199%	12	+ 3%	26	+ 33%	12
Washington	566,477,000	14	132.26	10	11.01	21	+14%	23	+125%	38	+ 4%	24	0%	38
West Virginia	199,319,000	33	101.85	32	11.41	17	+ 4%	47	+144%	33	− 5%	47	+ 8%	33
Wisconsin	595,843,000	12	125.23	17	11.69	15	+12%	29	+ 96%	48	+ 2%	29	− 13%	48
Wyoming	100,780,000	43	198.39	2	16.64	3	+22%	4	+328%	3	+11%	4	+ 90%	3
Total U. S.	**$25,390,809,000**		**$115.29**		**$10.45**		+12%		+173%		+ 2%		+ 21%	

(a) Reported by M. M. Chambers of Illinois State University as state tax funds appropriated for operating expenses and scholarship programs for higher education. Amount of appropriations may be reduced later in some states because of shortfall in revenues. Not included are appropriations for capital outlay or money from sources other than state taxes. Included are appropriations for annual operating expenses even if appropriated to some other agency of the state for ultimate allocation to institutions of higher education. Pre-allocated state taxes whose proceeds are dedicated to any institution of higher education are included. Also included are state tax funds appropriated for scholarships and statewide governing or coordinating boards.

(b) State appropriations divided by the Census Bureau's population estimates for 1982.

(c) State appropriations divided by personal income, in thousands of dollars, reported by the Commerce Department for 1983.

(d) Increase in appropriations for 1983-84 over 1982-83, as reported by M.M. Chambers.

(e) Increase in appropriations for 1983-84 over 1973-74, as reported by M.M. Chambers.

(f) Two-year increase in appropriations adjusted for inflation of 9.8 per cent, as indicated by the Labor Department's Consumer Price Indexes for June, 1983, and June, 1981.

(g) Ten-year increase in appropriations adjusted for inflation of 125.2 per cent, as indicated by the Labor Department's Consumer Price Indexes for June, 1983, and June, 1973.

FACT-FILE-Continued

State Appropriations for Higher Education

	Appropriations 1983-84 (add 000)	2-year change
SOUTH CAROLINA—Continued		
South Carolina St C	15,230	+30%
Winthrop C	13,176	+18%
C of Charleston	12,441	+ 6%
Citadel Military C of SC	9,837	+ 8%
Francis Marion C	6,584	+ 6%
Lander C	4,750	+15%
Board for Tech & Comp Ed	62,519	+12%
Aid to pvt-coll students	12,123	− 1%
Other appropriations	1,748	+ 4%
Total	**$ 382,471**	**+ 9%**
SOUTH DAKOTA		
South Dakota St U	$ 19,179	0%
U of South Dakota	16,904	− 2%
SD Sch of Mines & Tech	4,937	+ 2%
Northern St C	3,727	− 5%
Black Hills St C	2,933	− 7%
Dakota St C	1,963	+ 2%
Student aid	180	n/c
Other appropriations	3,247	n/c
Total	**$ 53,070**	**− 7%**
TENNESSEE		
U of Tennessee	$ 177,438	+39%
Memphis St U	34,701	+10%
East Tennessee St U	22,824	+ 9%
Middle Tenn St U	20,382	+13%
Tennessee Tech U	15,494	+15%
Tennessee St U	13,569	− 3%
Austin Peay St U	8,491	+10%
Community colleges	35,153	+ 8%
State tech insts	18,886	+32%
Other appropriations	40,800	n/c
Total	**$ 387,738**	**+ 9%**
TEXAS		
U of Texas	$ 805,518	+16%
Texas A&M U	278,966	+23%
Texas Tech U	118,028	+13%
U of Houston	127,824	+18%
Texas St U System	80,228	+ 9%
TEXAS—Continued		
E Texas St U	25,886	+ 6%
U System of S Texas	27,297	+20%
North Texas St U	73,520	n/c
Texas St Tech Inst	41,391	+27%
Texas Woman's U	33,768	+13%
Lamar U	30,893	+21%
Stephen Austin St U	26,788	+12%
Texas Southern U	31,203	+33%
Pan American U	20,829	+ 8%
Tex C Osteo Med	18	+27%
West Texas St U	15,745	+ 7%
Midwestern St U	11,188	+25%
Community colleges	430,369	+28%
Coordinating board	98,764	+37%
Other appropriations	4,137	+35%
Total	**$ 2,282,342**	**+20%**
UTAH		
U of Utah	$ 88,717	+14%
Utah St U	44,967	+13%
Weber St C	23,527	+15%
Utah Tech C		
Salt Lake	9,122	+15%
Provo	8,026	+15%
Southern Utah St C	7,272	+16%
Snow C	4,177	+22%
Dixie C	3,990	+15%
C of Eastern Utah	3,240	+17%
Student aid	169	+ 8%
Other appropriations	4,853	n/c
Total	**$ 198,080**	**+14%**
VERMONT		
U of Vermont	$ 21,818	+16%
Vermont St colleges	10,405	+18%
Student aid	8,060	+29%
Other appropriations	60	+58%
Total	**$ 40,343**	**+19%**
VIRGINIA		
Virginia Polytech Inst and St U	$ 104,626	+11%
Va Commonwealth U	101,720	+14%
VIRGINIA—Continued		
U of Virginia	95,370	+12%
Old Dominion U	29,936	+14%
C of William and Mary	26,419	+ 5%
George Mason U	26,310	+24%
James Madison U	19,023	+10%
Norfolk St U	15,732	+16%
Radford U	12,125	+14%
Virginia St U	11,187	+20%
Longwood C	6,082	+14%
Mary Washington C	6,169	+15%
Virginia Military Inst	5,831	+20%
Christopher Newport C	5,330	+12%
Community colleges	117,744	+12%
Student aid	23,704	n/c
Other appropriations	9,975	n/c
Total	**$ 617,283**	**+13%**
WEST VIRGINIA		
West Virginia U	$ 87,627	+ 5%
Marshall U	24,967	+11%
Fairmont St C	7,486	+ 1%
W Va Inst of Tech	6,642	+ 2%
West Virginia St C	6,539	+ 2%
West Liberty St C	5,813	+ 2%
Shepherd C	4,819	+ 4%
Concord C	4,581	+ 3%
W Va C of Grad Studies	3,981	+ 1%
Glenville St C	3,851	− 2%
West Virginia Sch of Osteopathic Med	2,738	n/c
Bluefield St C	3,603	+ 4%
Community colleges	8,742	+ 0%
Student aid	3,200	+ 7%
Other appropriations*	24,730	n/c
Total	**$ 199,319**	**+ 4%**
WISCONSIN		
U of Wisconsin System	495,999	+12%
Med C of Wisconsin	6,213	− 6%
Voc-tech adult ed	69,373	+14%
Other appropriations	24,260	+19%
Total	**$ 595,843**	**+12%**

Biennial Appropriations

	Appropriations 1983-85 (add 000)	2-year change
NORTH DAKOTA		
North Dakota St U	$ 81,245	+ 2%
U of North Dakota	78,534	+ 3%
St Sch of Science	18,120	− 5%
Minot St C	11,705	−16%
Dickinson St C	8,506	+ 4%
Valley City St C	6,824	0%
Mayville St C	5,842	− 2%
Community colleges	6,275	+ 3%
Aid to pvt-coll students	400	+ 0%
Total	**$ 217,451**	**0%**
WASHINGTON		
U of Washington	$ 337,373	+31%
Washington St U	200,037	+18%
W Washington U	56,829	+ 5%
E Washington U	55,896	+ 5%
Central Wash U	48,040	+ 3%
Evergreen St C	25,332	+10%
Community colleges	381,219	+ 3%
Student aid	24,716	+23%
Other appropriations	3,511	+26%
Total	**$ 1,132,953**	**+14%**
WYOMING		
U of Wyoming	$ 143,513	+19%
Community colleges	57,748	+31%
Other appropriations	299	+21%
Total	**$ 201,580**	**+22%**

NOTE: Some totals may be inconsistent with itemized figures because of rounding.
n/c Not comparable
* Estimated
— Indicates change of less than 1 per cent

State Appropriations

Continued from Page 13

Labor Department's Consumer Price Index, meant a decrease in actual support of 15 per cent in South Dakota, 14 per cent in California, and 9 per cent in North Dakota. The other states experienced decreases of 5 per cent or less.

An analysis of the current data compiled by Mr. Chambers shows that the average state appropriation per capita, which amounted to $115.29 this year, continued to increase. The average amount appropriated last year was $106.04, which was an increase from $101.50 in 1981-82.

Per-capita spending, based on the latest state population estimates from the U.S. Census Bureau, ranged from a high of $340.30 in Alaska to a low of $43.35 in New Hampshire. Those figures were higher than last year's in both states—up from $356.37 in Alaska and from $37.66 in New Hampshire.

Amounts per Capita

Among the states with the highest appropriations per capita this year were Wyoming with $198.39, Hawaii with $181.92, North Dakota with $161.55, Texas with $149.38, and Minnesota with $147.77.

States with the lowest appropriations included Maine with $67.48, New Jersey with $71.77, Missouri with $73.49, Pennsylvania with $75.91, and South Dakota with $76.14.

The average state appropriation per $1,000 of personal income, based on an analysis of the current data compiled by Mr. Chambers, was $10.45 this year, an increase from last year's average of $10.12 but a decrease from the 1981-82 average of $10.64.

On the basis of personal income, which allows differences in wealth among the states to be taken into account, appropriations ranged from a high of $20.85 per $1,000 in Alaska to a low of $2.93 in New Hampshire. For both states, those figures were decreases from those of 1982-83—down from $25.91 in Alaska and from $3.77 in New Hampshire.

Other states that ranked high this year in appropriations per $1,000 of personal income were Mississippi with $16.80, Wyoming with $16.64, North Carolina with $15.23, Hawaii with $15.17, and New Mexico with $14.83.

$5.31 in New Jersey

States with the lowest appropriations calculated on this basis included New Jersey with $5.31, Massachusetts with $5.38, Pennsylvania with $5.83, Connecticut with $6.15, and Maine with $6.29.

The data compiled by Mr. Chambers include appropriations made from state tax funds for operating expenses. They do not include any appropriations for capital outlay.

In general, the appropriations are made for two- and four-year colleges and universities, postsecondary vocational and technical institutes, statewide governing boards, fringe benefits for faculty members, and student financial aid.

The complete annual report, "Appropriations of State Tax Funds for Operating Expenses of Higher Education: 1983-84," will be available next month from the National Association of State Universities and Land-Grant Colleges, One Dupont Circle, Washington 20036. Copies are free for association members and $3.50 for others.

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